KV-27TW75/27TW76

RM-Y102

SERVICEMANUAL

US Model

KV-27TW75

Chassis No. SCC-E54F-A

KV-27TW76

Chassis No. SCC-E54G-A

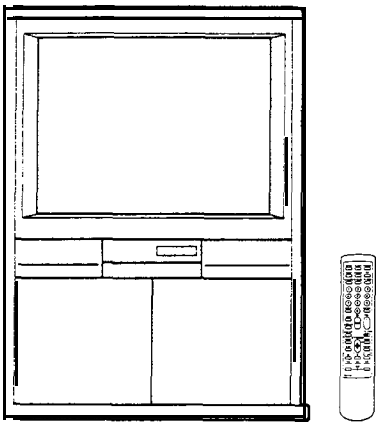
Canadian Model

KV-27TW75

Chassis No. SCC-E65F-A

KV-27TW76

Chassis No. SCC-E65D-A



KV-27TW75 (Natural wood finish)
KV-27TW76 (Black)

LN-1 CHASSIS

MODELS OF THE SAME SERIES	
KV-27TW75/27TW76	
KV-27TS27/27TS31	

SPECIFICATIONS

Television system American TV standards

Channel coverage VHF: 2 – 13
UHF: 14-69
Cable TV: 1 – 125

Picture tube Microblack™ Trinitron® tube
27-inch picture measured diagonally
28-inch picture tube measured diagonally

Antenna 75-ohm external antenna terminal for VHF/UHF

Input VIDEO and S VIDEO
S VIDEO IN (S terminal)
Y: 1 Vp-p, 75-ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75-ohms
Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative
Audio (phono jacks): 500 mVrms (100% modulation)
Impedance: 47 kilohms

output AUDIO OUT (VARIABLE) (phono jacks)
More than 408 mVrms at the maximum volume setting (variable)
Impedance: 5 kilohms

Speaker output 5 W x 2

Audio **Power: 5** watts/channel minimum continuous RMS power, 2 channels driven into 8 ohms from 80Hz to 20kHz with 10% or less THD, measured from auxiliary input to load

Power requirements **120** V AC, 60 Hz

Power consumption **170w**
5W Standby mode

Dimensions (w / h / d) 758.0 x 100.0 x 635.0 mm (29⅞ x 39⅜ x 25 in.)

Weight 88 6 kg (195 lbs 6 oz)

Supplied accessories

Remote commander RM-Y102 (1) with 2 size AA (R6) EVEREADY batteries .

Recommended accessories

UN mixer EAC-66
Connecting cable
VMC-810/820S, YC-15 V/30 V, RK-74A

Design and specifications are subject to change without notice.

MICROFILM

TRINITRON® COLOR TV

SONY®

(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAPTOTHE METAL CHASSIS, CRTSHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURTCIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DETOUT DEPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS ÁLA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE A SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTSSONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLEMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SAFETY CHECK-OUT

(US Model only)

Aftercorrecting theoriginalserviceproblem, performthefollowing safety checks before releasing the set to the customer:

1 Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges

2 Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.

3 Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced Be absolutely certain that you have replaced all the insulators.

4 Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair Point them out to the customer and recommend their replacement

5 Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.

6 Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer

7. Check the condition of the monopole antenna (if any) Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement

8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate, be suspicious of your HV meter if sets always have low HV

9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage Check leakage as described below

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A Follow the manufacturers' instructions to use these instruments

2 A battery-operated AC milliammeter The Data Precision 245 digital multimeter is suitable for this job

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 2.50 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a coldwater pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig B)

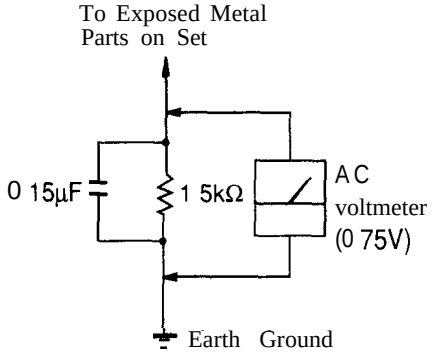


Fig A. Using an AC voltmeter to check AC leakage

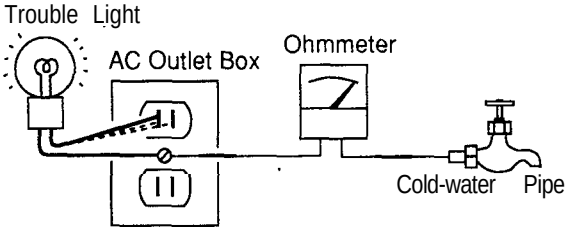


Fig B Checking for earth ground.

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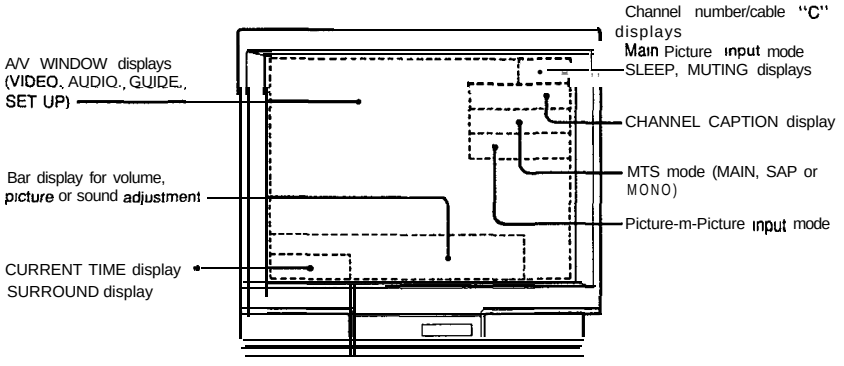
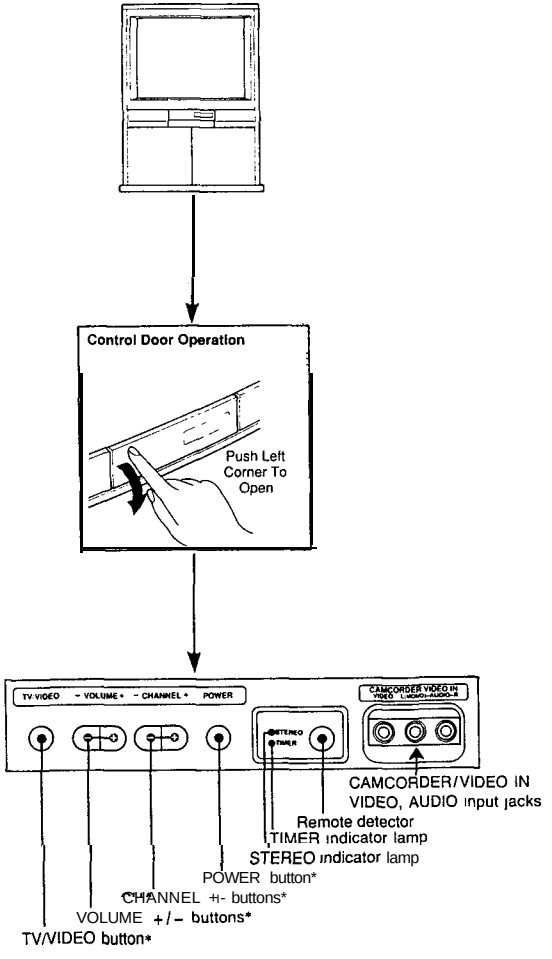
SECTION 1
GENERAL

1-1. LOCATING THE CONTROLS

Screen Displays

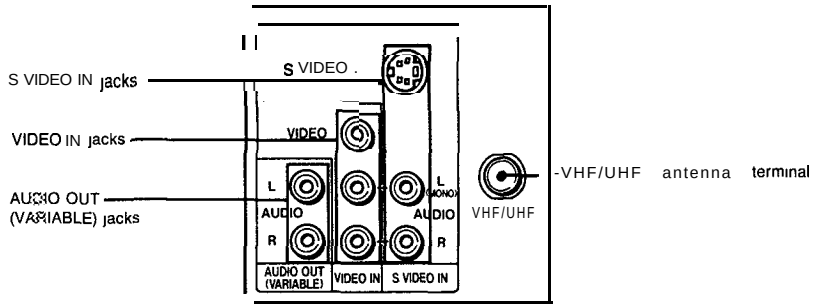

Channel number/cable "C" displays
Main Picture input mode
SLEEP, MUTING displays
A/V WINDOW displays (VIDEO, AUDIO, GUIDE, SET UP)
CHANNEL CAPTION display
MTS mode (MAIN, SAP or MONO)
Bar display for volume, picture or sound adjustment
Picture-in-Picture input mode
CURRENT TIME display
SURROUND display

Front Panel

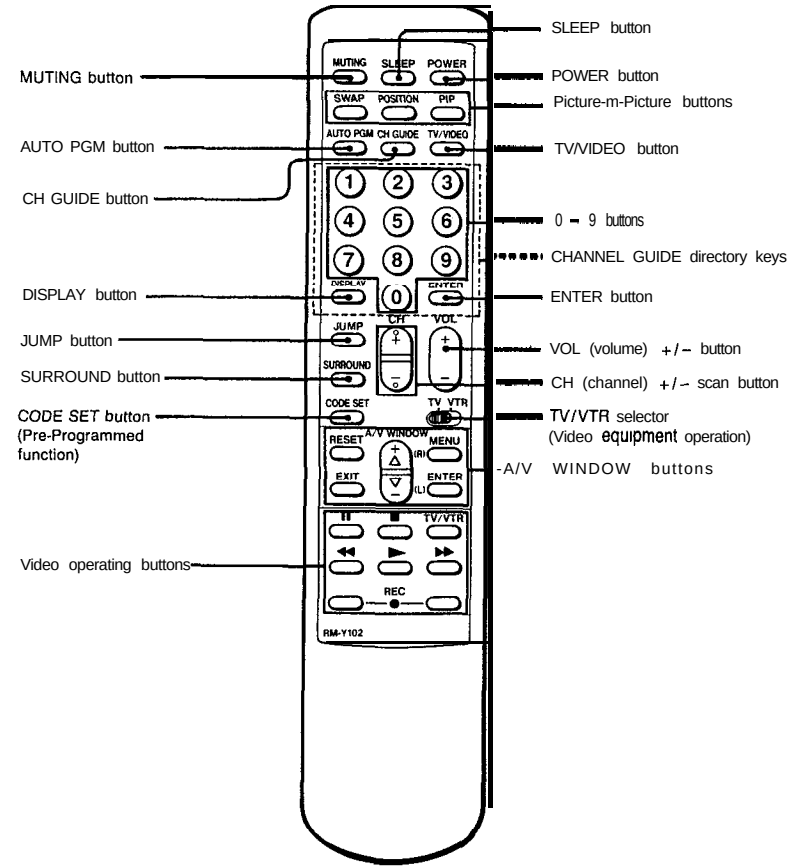


* Buttons with the same function are also located on the Remote Commander.

Rear Panel



Remote Commander



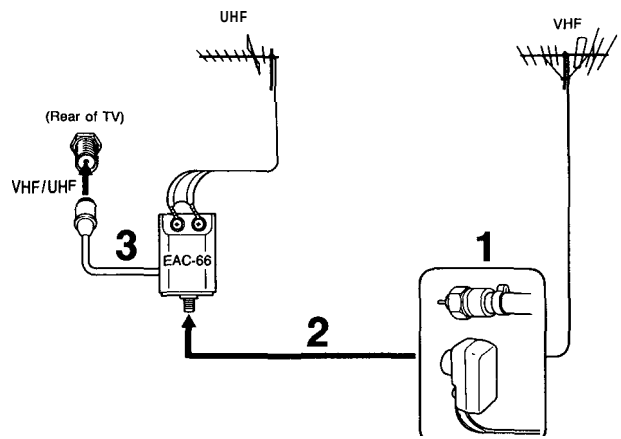
1-2. CONNECTING TV ANTENNA/CABLE

Use the EAC-66 U/V mixer (not supplied).

1 **Prepare the VHF antenna end using the appropriate connector (p. 12)**

2 Connect the cables to the mixer

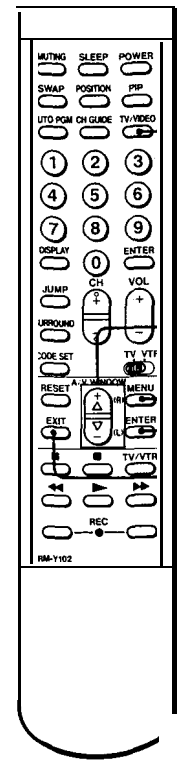
3 **Attach the mixer to the VHF/UHF terminal.**



When the U/V mixer Is used
Snow and noise may **appear in the pictures of the cable N channels over 37 (W+1)**

1-3. TURNING THE CABLE MODE ON OR OFF

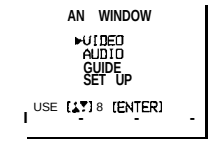
AN of the controls are on the Remote Commander.



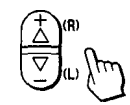
If you have cable connected to your N , follow the steps below to turn the cable connection on or off. Cable mode IS preset to ON when you use your N for the first time: turn cable OFF to preset or watch VHF or UHF channels.

1 **Press MENU to display the following screen.**

MENU

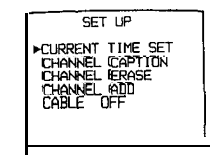


2 **Press the + / – button to select SET UP**

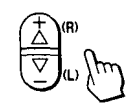


Press ENTER.

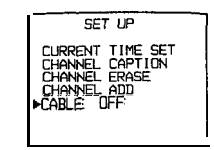
ENTER



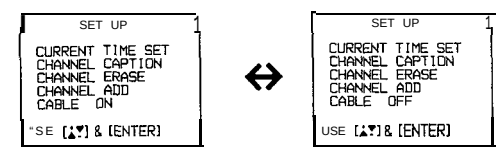
3 **Press + / – button and ENTER to select CABLE.**



ENTER



Press the + / – button and ENTER to select ON or OFF alternately.



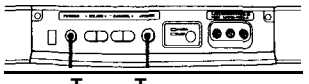
To return to TV mode.
Press EXIT.

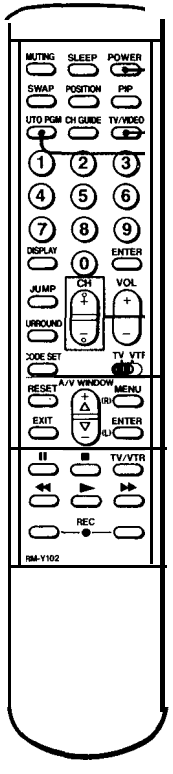
Notes

- You cannot set CABLE ON/OFF while the N IS in VIDEO mode. Before setting, select N mode by pressing N/VIDEO.
- The menu will be cancelled automatically after 10 seconds if you do not push any buttons during that time.

I-4. PRESETTING TV CHANNELS

Presetting TV





-1 POWER

-TV/VIDEO

-3 AUTO PGM

-4 CH +,-

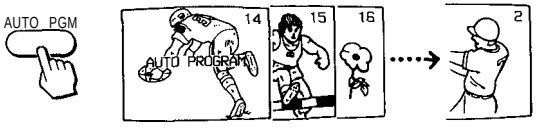
1 Press POWER on the **N** or the Remote Commander to turn the TV on.

2 Turn the cable connection on or off, depending on if you want to preset cable or VHF/UHF channels.

(FOLLOW THE STEPS ON P 14)

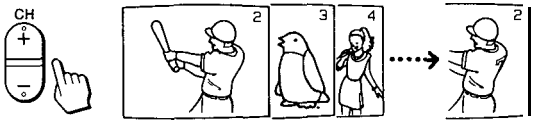
If "VIDEO" or "S VIDEO" is displayed on the screen, press the TV/VIDEO button on the TV or the Remote Commander so that a channel number appears.

3 Press AUTO PGM



"AUTO PROGRAM" is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the TV's memory.
When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

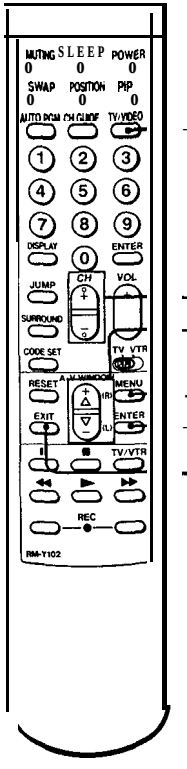
4 Press CH +/– to check or VIEW preset channels



Channels that can be received on this TV:

VHF: 2 — 13
UHF 14 — 63
Cable: 1 — 125

To erase ""necessary channels, or to add channels that could not be preset automatically because their signal strength was too weak, follow the steps in "Erasing Unnecessary Channels" and "Presetting Only Dewed Channels"



-N/VIDEO

-4 CH +/-

-2,3 A/V WINDOW +/-

-1 MENU

-ENTER

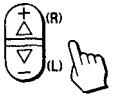
-EXIT

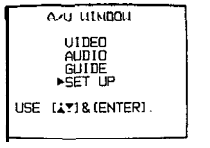
Use this feature to erase non-receiving channels from the channel scan memory.

Note
You cannot use CHANNEL ERASE while the TV is in VIDEO mode. Before erasing channels. select **N** mode by pressing TV/VIDEO.

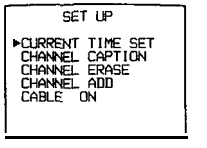
1 Press MENU to display the following screen.

2 Press the +/– button to select SET UP

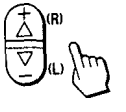


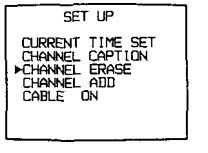


Press ENTER.

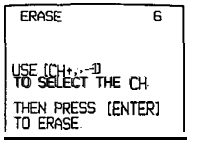


3 Press the +/– button to select CHANNEL ERASE.

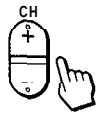


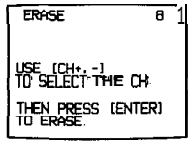


Press ENTER.

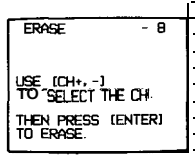


4 Press the CH +I- button to select the channel you want to erase.





Press ENTER.
A "—" appears before the channel number, showing that the channel has been erased from the channel scan memory.



The next time you press the CH + / - buttons, channel 8 will be skipped.
Repeat step 4 to erase other channels.

To return to TV mode
Press EXIT.

Note

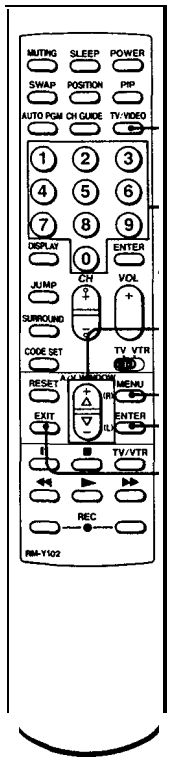
When you erase a VHF or UHF channel, the cable TV channel with the same number is also erased, and vice versa.

Cable N channel chart*

Cable N systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Number on this TV	Corresponding cable TV channel
1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
16	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
93	W+57
94	W+58
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W+59
101	W+60
102	W+61
123	W+82
124	W+83
125	W+84

* This designation of cable N channels conforms to the EIA/NCTA recommendation.
Check with your local cable N company for more complete information on the available channels.



-N/VIDEO
-4 0 – 9 buttons
-2,3 A/V WINDOW +/-
-1 MENU
-ENTER
– EXIT

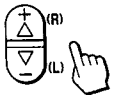
Use this feature to add channels one by one to the channel scan memory.

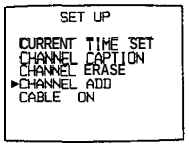
Note

You cannot use CHANNEL ADD while the N is in VIDEO mode. Before adding channels, select N mode by pressing TV/VIDEO.

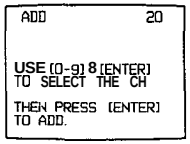
1-2 (FOLLOW STEPS 1 & 2 ON)

3 Press the +/– button to select CHANNEL ADD.

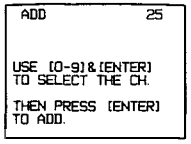




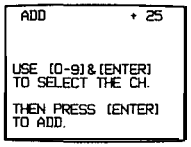
Press ENTER.



4 Press the 0 – 9 buttons to Select the channel you want to add. For example, to add channel 25. press 2. 5 and ENTER.



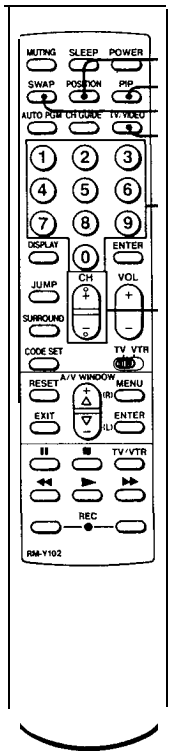
Press ENTER again.
A "+" appears before the channel number, showing that the channel has been added to the channel scan memory.



Repeat step 4 to add other channels.

To return to TV mode
Press EXIT.

1-5. USING PICTURE-IN-PICTURE



-POSITION
•PIP
'SWAP
•TV/VIDEO
•0 – 9 buttons
-CH +/-

With this feature, you can watch both the main picture and a video source. simultaneously, by means of a wmdow picture.

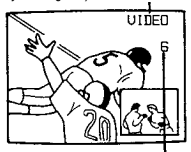
For example, use Picture-m-Picture when you want to watch a N program and a video source from connected equipment (VCR, video disc player, etc.) at the same time.

If you connect a VCR, you can watch two different N programs at the same time.

Displaying a window picture — PIP

Press PIP

Input source mode or TV channel for the main picture (display is green)

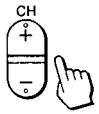


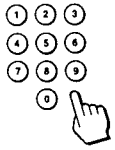
Input source mode or TV channel for the window picture (display IS white)

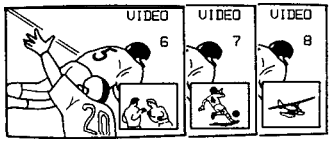
A window picture will appear in the same input mode as the last time you used PIP

Scanning channels in the window picture

Press CH +/– or the 0 – 9 buttons and ENTER.





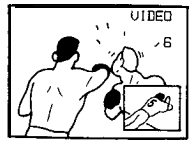


To make the wmdow picture disappear
Press PIP again.

Swapping the main and window pictures — SWAP

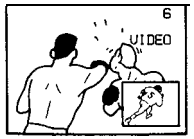
1 Press PIP to display a wmdow picture

2 Press SWAP

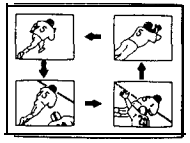


Changing the position of the window picture — POSITION

1 Press PIP to display a wmdow picture.



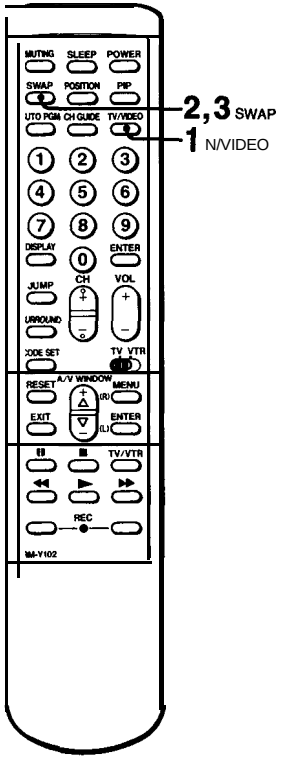
2 **Press POSITION.**
Each time you press POSITION, the window picture will move counterclockwise on the screen, as illustrated below.



To change the input made of the wmdow picture
1 Press TV/VIDEO to change the input mode of the main picture.
(Selects TV, VIDEO, S VIDEO in sequence)
2 Press SWAP to swap the main picture with the window picture.

Notes

- You cannot hear the sound of the window picture channel.
- *If the* main picture is blocked. the display "BLOCKED" will appear on the ma," screen, and Picture-in-Picture will not function.
- If the main picture IS not receiving an image, the wmdow picture will disappear. It will reappear when you switch to a receiving channel.
- When the ma," picture is black and white, depending on the TV signal some window picture images may also be black and white.
- When you turn PIP on. or when you turn the TV on with PIP mode on. the window picture will appear at the bottom right of the screen.
- Depending on the condition of the main picture's signal, the window picture may be affected



Displaying a VIDEO Input image as a window picture

To watch VIDEO images (VCR playback or TV through a VCR tuner) using Picture-m-Picture, first select a program mode (cable or VHF/UHF) by following the steps, "Turnmg the Cable Connection On or Off." Then follow the steps below.

1 Press TV/VIDEO to select the appropriate video input mode. (Selects TV, VIDEO and S VIDEO modes in sequence)

N/VIDEO

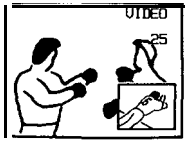
The video image from the input mode you select will appear as the main picture.

2 Press SWAP so that the video input prcture becomes a window prcture.

SWAP

3 Press SWAP again to change the video input picture back to the main prcture.

SWAP



You can only change VIDEO input modes of the main prcture.

Note

To operate your VCR with the supplied Remote Commander, ▬ "Using the Remote Commander."

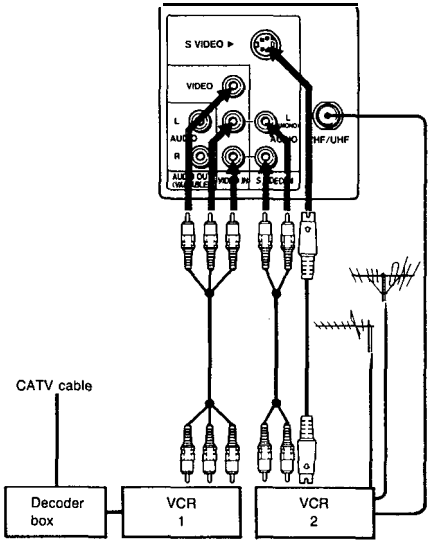
Displaying pay cable TV as a window picture

In order to use Picture-m-Picture with pay cable TV images, make sure the connections are made as illustrated below. Select cable mode by following the steps, "Turning the Cable Connection On or Off." Then follow the steps below.

1 - 3 Follow steps 1 ▬ 3 in "To display a VIDEO input image as a window picture".

4 Put your VCR on an inactive channel (CH 3 or 4).

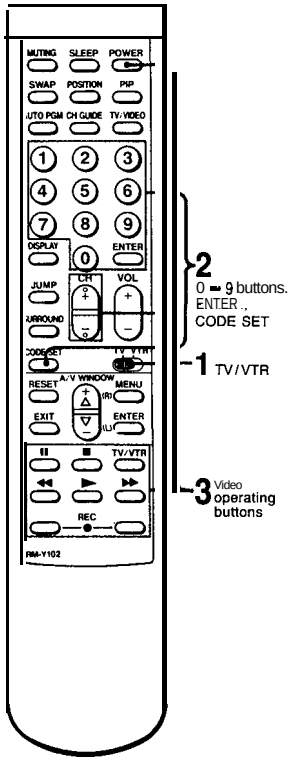
5 Change pay cable TV channels with the decoder box



1-6. USING THE PRE-PROGRAMMED REMOTE COMMANDER

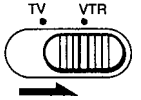
You can operate other video equipment that has an infrared remote detector with this supplied Pre-Programmed Remote Commander.

Operating Sony or non-Sony Video Equipment — Pre-Programmed Function



With the supplied Remote Commander, you can operate a Sony video cassene recorder (Beta. 8mm, VHS) or multi disc player as well as most non-Sony video equipment connected to your TV by following the steps below.

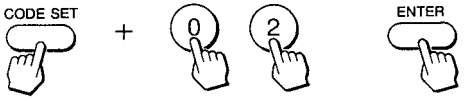
1 **Set the TV/VTR** *selector* **to** *VTR.*



Note

When the selector is se, to VTR, the POWER and CH +/– buttons on the Remote Commander function as video operating buttons and cannot be used to operate the TV.

2 While pressmg CODE SET, press the 0 – 9 buttons to enter the manufacturer's code number For example, to operate a Sony 8 mm VCR, press 0, 2 and ENTER.



3 Use the video operating buttons on the Remote Commander to operate the video equipment.

Operating a VCR

To turn on or off	Press POWER
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/–
To record	Press ● (2 buttons simultaneously).
To play	Press ▶
To stop	Press ■.
To fast forward	Press ▶▶
To rewind the tape	Press ◀◀.
To pause	Press II.
To search the picture forward and backward	Press ▶▶ or ◀◀ during playback.

Operating a Video Disc Player

To play	Press ▶
To stop	Press■ .
To pause	Press II. *To resume normal playback, press again.* ● Th,s function is effective only for CAV (standard-play disc). With CLV (extended-play disc). the TV will go into the standby mode if II is pressed.
To search the picture forward and backward	Keep pressmg ▶▶ or ◀◀ during playback. *To·resume normal playback, release the button.*

Manufacturers and Code Numbers (VCR)

Manufacturer	Code number
SONY	01, 02. 03. 04
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05.08
GOLDSTAR	25
HITACHI	07, 08
JVC	16
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19. 26. 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05.06
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05. 06
RCA	07, 08
SAMSUNG	24. 32
SANYO	11, 15
SCOTT	21
SHARP	13.14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	28. 29
TOSHIBA	20. 21
TOTE VISION	25
ZENITH	17

The code numbers for Sony equipment are assigned as follows:

01	Beta. ED Beta VCR
02	8mm VCR
03	VHS VCR
04	Video disc player

For your convenience

Write the manufacturer name and cods number for your equipment onto one of the supplied self-adheswe labels and affix to the Remote Commander for easy reference.

	BRAND	CODE
1		
2		
13		

Notes

- If more than one code number is listed for manufacturers other than Sony, by entering them one by one, until you come to the correct code for your equipment.
- If the video equipment does no. have a certain function, the corresponding button on this Remote Commander will no, operate.

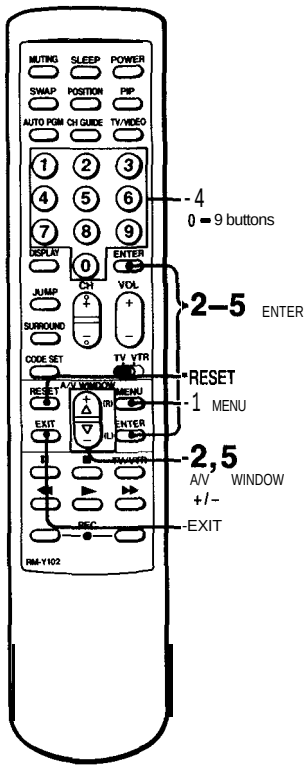
Note

In some rare cases, you may no, be able to operate your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please "se the equipment's awn remote control unit.

CAUTION

When you remove the batteries from the Remote Commander. all the settings will revert to the Sony Beta setting. Reset the codes by following the steps on p. 30.

1-7. SETTING THE CURRENT TIME



Set the current time before using the Timer-activated functions from the GUIDE me™.

1 Press MENU to display the following screen.

MENU

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

2 Press the +I- button to select SET UP

(R) (L)

```
A/V WINDOW
 VIDEO
 AUDIO
 GUIDE
▶SET UP
USE [▲▼] & [ENTER].
```

Press ENTER.
CURRENT TIME SET is already selected for you.

ENTER

```
SET UP
▶CURRENT TIME SET
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE ON
```

3 Press ENTER.

ENTER

```
CURRENT TIME SET
-- --AM
SET THE TIME.
USE [0-9] & [ENTER].
```

4 Press the 0 – 9 buttons and ENTER to enter the current time. For example, to set the time at 3:15, press 0, 3, 1, 5. (You must press 4 digits.)

0 3 1 5

```
CURRENT TIME SET
03 15AM
SET THE TIME.
USE [0-9] & CENTER1
```

Press ENTER.

ENTER

```
CURRENT TIME SET
3:15AM
SET AM OR PM.
USE [▲▼] & [ENTER]
```

5 Press the +/– button, to select AM or PM alternately.

(R) (L)

```
CURRENT TIME SET
3:15AM
SET AM OR PM.
USE [▲▼] & [ENTER].
```

↔

```
CURRENT TIME SET
3:15PM
SET AM OR PM.
USE [▲▼] & [ENTER].
```

Press ENTER

ENTER

```
CURRENT TIME SET
3:15PM
CURRENT TIME
IS SET.
```

To clear the time setting
Press RESET.

To reset the time
Press RESET while in the CURRENT TIME screen. and repeat steps 4 and 5.

To display the time
Set TIME DISPLAY ON/OFF.

To return to TV mode
Press EXIT.

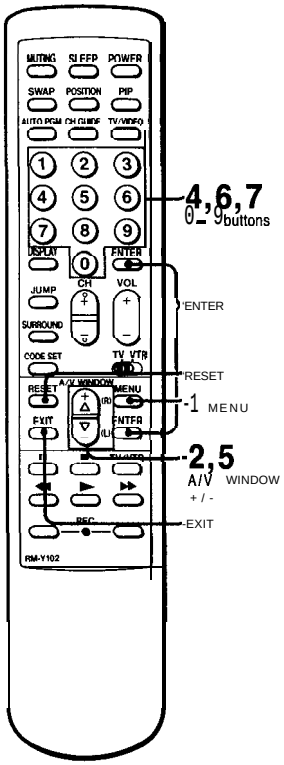
Notes

- The internal clock of this TV operates on a 12-hour cycle. If a 24-hour cycle number (for instance, 13:00) is entered. it will be cleared when you press ENTER.

  12:00 AM stands for midnight.
  12:00 PM stands for noon.

- All the settings *including* TIME SET will be erased if you unplug the TV, or if a power *failure* occurs. Reset the current time by following steps 1 – 5.

1-8. USING THE TIMER-ACTIVATED FUNCTIONS-GUIDE



Using the GUIDE feature, you can call up an on-screen menu giving instructions on how to use the timer-activated functions: ON/OFF TIMER, CHANNEL BLOCK, AND TIME DISPLAY ON/OFF

Setting the ON/OFF TIMER

With this function you can set your favorite program to appear cm the screen at the time that you set.

EXAMPLE: Set the timer to turn on the N to channel 21 at 3:15 PM, for 2 hours.

1 Press MENU to display the following screen.

MENU

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

2 Press the + / – button to select GUIDE.

(R) (L)

```
A/V WINDOW
 VIDEO
 AUDIO
▶GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

Press ENTER.

ON/OFF TIMER is already selected for you.

ENTER

```
GUIDE
▶ON/OFF TIMER
 CHANNEL BLOCK
 TINE DISPLAY ON
```

3 Press ENTER.

```
GUIDE
CURRENT TIME IS
NOT SET.
PRESS [ENTER] TO
SET THE TIME
```

ENTER

If this screen appears, follow steps 3 – 5 on pp. 32 – 33. Then begin again from step 1 on this page.

```
ON/OFF TIMER
-- --AM -H CH---
SET THE TIME.
USE [0-9] & [ENTER]
```

If this screen appears. continue from step 4 on the next page.

4 Set the time that you want the TIMER to start by pressing 0 – 9 (you must press 4 digits) and ENTER.

0 3 1 5 ENTER

```
ON/OFF TIMER
03:15AM -H CH---
SET THE TIME.
USE [0-9] & [ENTER]
```

5 Select AM or PM by pressing the + / – buttons. and press ENTER.

(R) (L) ENTER

```
ON/OFF TIMER
3 15PM -H CH---
SET AM OR PM
USE [▲▼] & [ENTER]
```

6 Set the duration of time that you want the N to reman on, by pressing 1 – 9 and ENTER.

2 ENTER

```
ON/OFF TIMER
3 15PM 2H CH---
SET THE DURATION.
USE [0-9] & [ENTER]
```

7 Set the channel that you want the N to turn on to, by pressing 0 – 9 and ENTER.

2 1 ENTER

```
ON/OFF TIMER
3: 15PM 2H CH 21
SET THE CHANNEL.
USE [0-9] & [ENTER]
```

The following screen will appear, showing that the TIMER has been set.

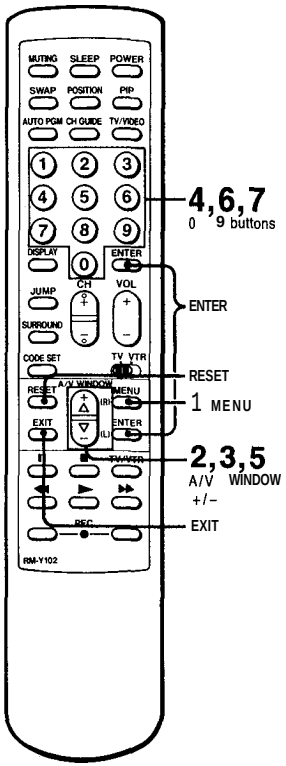
```
ON/OFF TIMER
3 15PM 2H CH 21
ON/OFF TIMER
IS SET.
```

To clear the ON/OFF TIMER setting
Press RESET.

To return to TV mode
Press EXIT.

Notes

- While the TIMER is set. the TIMER indicator lamp on the TV will be lit.
- One minute before the timer goes off. the "TV WILL TURN OFF" display will appear on the screen.
- If you have not set the clock correctly. the ON/OFF TIMER will not operate. 'Setting the CURRENT TIME" to set the clock.
- The TIMER setting will be erased if you unplug the TV, or if a power failure occurs Repeat steps 1 – 7 to reset the TIMER.



Setting CHANNEL BLOCK

Use this function to block a channel from appearing on the screen during the preset time, for instance, to prevent children from watching undesirable programs.

EXAMPLE: Set CHANNEL BLOCK at 8:45 PM, for one hour, on channel 38.

1 Press MENU to display the following screen

MENU

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER]
```

2 Press the + / – button to select GUIDE.

(R) (L)

```
A/V WINDOW
 VIDEO
 AUDIO
▶GUIDE
 SET UP
USE [▲▼] & [ENTER]
```

Press ENTER.

ENTER

```
GUIDE
▶ON/OFF TIMER
 CHANNEL BLOCK
 TIME DISPLAY ON
```

3 Press the + / – buttons to select CHANNEL BLOCK.

(R) (L)

```
GUIDE
 ON/OFF TIMER
▶CHANNEL BLOCK
 TIME DISPLAY ON
```

Press ENTER.

ENTER

```
CURRENT TIME IS
NOT SET.

PRESS [ENTER] TO
SET THE TIME.
```

If this screen appears, follow steps 3 5. The begin again from step 1 on this page.

```
CHANNEL BLOCK

__ __:__AM _H CH___

SET THE TIME.
USE [0-9] & [ENTER]
```

If this screen appears, proceed to step 4 on the next page.

4 Set the time that you want CHANNEL BLOCK to start by pressing 0 – 9 (you must press 4 digit) and ENTER.

0 8 4 5 ENTER

```
CHANNEL BLOCK

08:45AM _H CH___

SET THE TIME.
USE [0-9] & [ENTER]
```

5 Select AM or PM by pressing the + / – button, and press ENTER.

(R) (L) ENTER

```
CHANNEL BLOCK

8:45PM _H CH___

SET AM OR PM.
USE [▲▼] & [ENTER]
```

6 Set the duration of time that you want the TV to remain blocked (UP to 9 hours), by pressing 1 – 9 and ENTER.

1 ENTER

```
CHANNEL BLOCK

8:45PM 1H CH---

SET THE DURATION.
USE [0-9] & [ENTER]
```

7 Set the channel that you want to block, by pressing 0 – 9 and ENTER.

3 8 ENTER

```
CHANNEL BLOCK

8:45PM 1H CH 38

SET THE CHANNEL.
USE [0-9] & [ENTER]
```

The following screen will appear, showing that CHANNEL BLOCK has been set.

ENTER

```
CHANNEL BLOCK

8 45PM 1H CH 38

CHANNEL BLOCK
IS SET.
```

If you select a channel which has been blocked, the BLOCKED screen will appear.

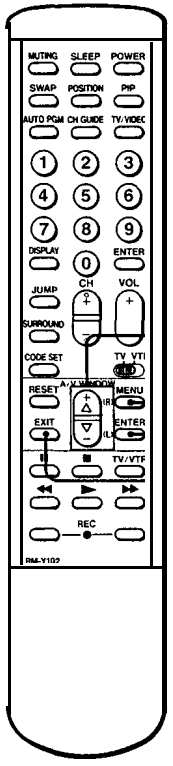
```
BLOCKED
```

To clear the BLOCK setting
Press RESET.

To return to TV mode
Press EXIT.

Notes

- If you se, a new CHANNEL BLOCK by following steps 1 – 7, the original setting will be erased.
- If you have no, se, the clock correctly. CHANNEL BLOCK will no, operate. "Setting the CURRENT TIME" to se, the clock.



-2,3,4 A/V WINDOW +/-

-1 MENU

-ENTER

-EXIT

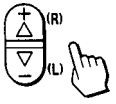
Setting the TIME DISPLAY

1 Press MENU to display the following screen

MENU

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] 8 CENTER1
```

2 Press the +I- button to select GUIDE.



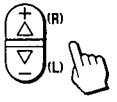

```
A/V WINDOW
 VIDEO
 AUDIO
▶GUIDE
 SET UP
USE [▲▼] & CENTER1
```

Press **ENTER.**

ENTER

```
GUIDE
MN/OFF   TIMER
CHANNEL  BLOCK
TIME  DISPLAY' ON
```

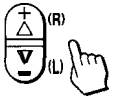
3 Press the +/– button and ENTER to select TIME DISPLAY



ENTER

```
GUIDE
 ON/OFF TIMER
 CHANNEL BLOCK
▶TIME DISPLAY: ON
```

4 Press the +I- button to select ON or OFF alternately.
(Display IS red)




```
GUIDE
ON/OFF TIMER
CHANNEL BLOCK
TIME DISPLAY OFF
USE [▲▼] & [ENTER,
```

```
GUIDE
ON/OFF TIMER
CHANNEL BLOCK
TIME DISPLAY ON
[▲▼]  &  [ENTER]
```

Press ENTER.
The display will turn green, showing that the mode has been set.

ENTER

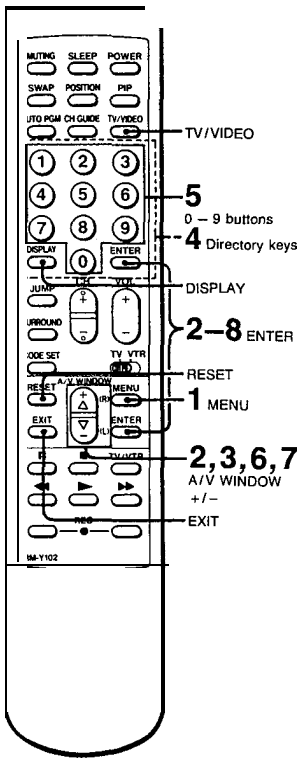
```
GUIDE
 ON/OFF TIMER
 CHANNEL BLOCK
▶TIME DISPLAY ON
```

To return to N mode
Press EXIT.

Notes

- When TIME DISPLAY IS set to ON, the time will remain on the screen.
- The men" screens will be cancelled automatically after 10 seconds if you do not push any buttons during that time.

I-9. USING CHANNEL CAPTION



Captionmg the channel display — CHANNEL CAPTION

Use this feature to caption up lo 12 channel number displays with the matching channel call letters. For example, caption channel 20 with ESPN.

1 **Press MENU to display the following screen**

MEN"

```
A/V WINDOW
▶VIDEO
AUDIO
GUIDE
SET UP
USE [▲▼] & [ENTER,
```

2 **Press the + / – button to select SET UP**

+ A (R)
▽ 8 — (L)

```
A/V WINDOW
VIDEO
AUDIO
GUIDE
▶SET UP
USE [▲▼] 8 [ENTER]
```

Press ENTER.

ENTER

```
SET UP
▶CURRENT TIME SET
CHANNEL CAPTION
CHANNEL ERASE
CHANNEL ADD
CABLE ON
```

3 **Press the + / – button to select CHANNEL CAPTION.**

+ A (R)
V 8 — (L)

```
SET UP
CURRENT TIME SET
▶CHANNEL CAPTION
CHANNEL ERASE
CHANNEL ADD
CABLE ON
```

Press ENTER

ENTER

```
CHANNEL 16
CAPTION -----
SELECT A DESIRED
CH GUIDE KEY FROM
[0-9], [DISPLAY]
& [ENTER].
```

4 **Enter a directory (CHANNEL GUIDE) number for the caption by pressmg one of the directory keys. For example, to set caption number 4, press 4.**

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
DISPLAY ⓪ ENTER

```
CHANNEL 16
CAPTION 4----
USE [0-9] & [ENTER]
TO SELECT THE CH.
```

5 **Select the channel you want to caption by pressmg 0 — 9 and ENTER.**

2 0 ENTER

```
CHANNEL 20
CAPTION 4----
SELECT THE LETTER.
USE [▲▼] & [ENTER]
```

6 **Select the first letter by pressmg the + / – button and ENTER**
Press + to advance alphabetically; press - to go back.

+ △ (R)
▽ — (L)

ENTER

```
CHANNEL 20
CAPTION 4E---
SELECT THE LETTER.
USE [▲▼] & [ENTER].
```

7 **Select each remaining letter by repeating step 6.**
(For a 3-letter caption, leave a space by pressmg ENTER only.)

+ △ (R)
▽ — (L)

ENTER

```
CHANNEL 20
CAPTION 4ESPN
PRESS [ENTER] TO
CONTINUE.
```

8 **To set the next caption. press ENTER again, and repeat the steps from step 4.**

ENTER

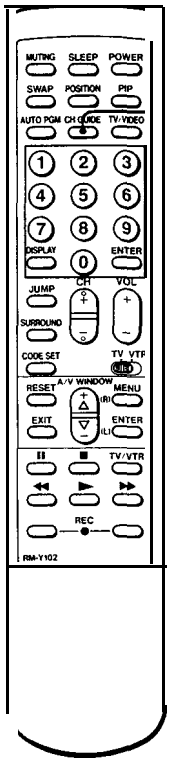
```
CHANNEL 20
CAPTION 4ESPN
SELECT A DESIRED
CH GUIDE KEY FROM
[0-9], [DISPLAY],
& [ENTER].
```

To erase unneeded captions
Call the caption setting screen by following steps 1 – 4. and press RESET.

To return to TV mode
Press EXIT.

Notes

- You cannot use CHANNEL CAPTION while the N is in VIDEO or S VIDEO mode. Before setting captions, select N mode by pressing TV/VIDEO.



-1 CH GUIDE

-2 Directory keys

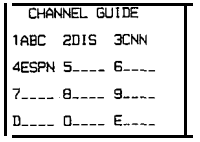
Viewing the captioned channels — CHANNEL GUIDE

Use this feature to display the captions you have set, and to select a channel directly for viewing.

1 Press CH GUIDE.

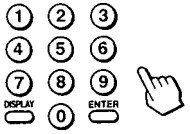
A directory appears, corresponding to the directory keys on the Remote Commander.

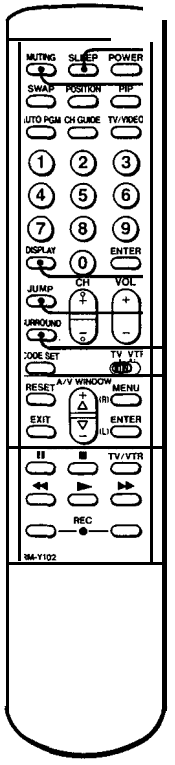
CH GUIDE



To cancel the CHANNEL GUIDE screen
Press CH GUIDE again.

2 Press the directory key of the channel you want to watch.





-SLEEP

--MUTING

-DISPLAY

-JUMP

-SURROUND

Muting the sound — MUTING

Press MUTING.

The display "MUTING" will appear on the screen.

MUTING

To restore the sound
Press MUTING again, or press VOL+

Keeping the channel displayed — DISPLAY

To display the channel
Press DISPLAY.

AN the current displays will appear for 3 seconds, then disappear. The channel display will remain on the screen.

DISPLAY

To cancel the display
Press DISPLAY again.

The channel disphy will disappear.

Listening to surround sound — SURROUND

Gives sound reproduction with the atmosphere of a movie theater or a concert hall.

To set
Press SURROUND.
The display ⇨ will appear on the screen for a few seconds.

SURROUND

To cancel
Press SURROUND again.
The display ⇨ will appear for a few seconds.

Usmg the sleep timer — SLEEP

Turns TV off automatically about 1 how after setting.
Press SLEEP

SLEEP

A green "SLEEP ON" display appears for a few seconds.
(A red "SLEEP" display will appear 1 minute before the TV shuts off.)

To cancel the setting
Press SLEEP again.
A green "SLEEP OFF" display appears for a *few seconds.*
O R
Turn the TV off.
The sleep timer setting will be cancelled.

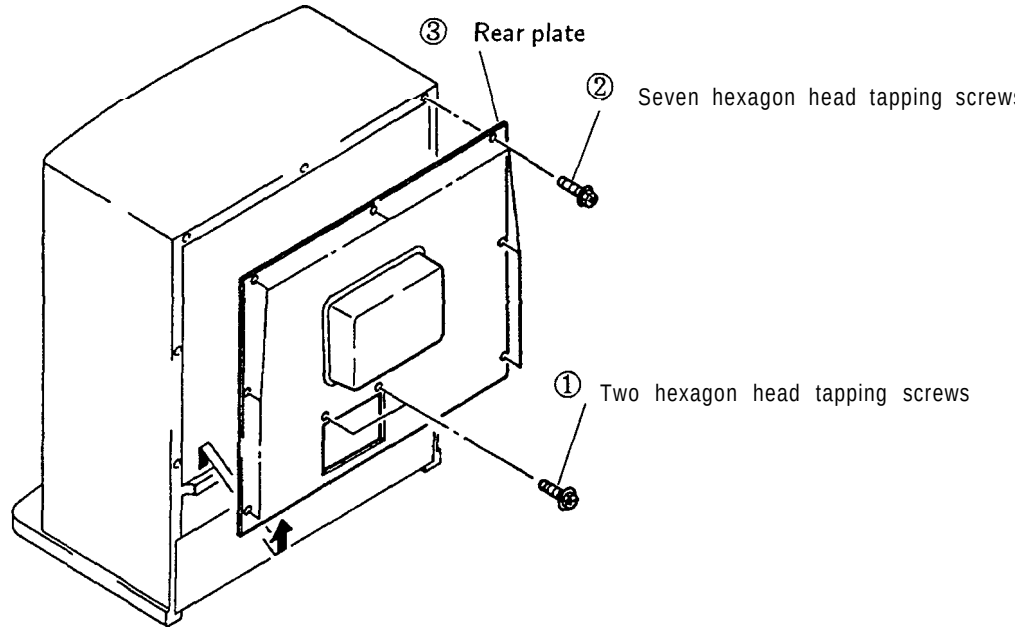
Switching quickly between 2 channels — JUMP

Press JUMP once to recall the channel you were watching previously; press JUMP again to switch back. Use this feature to keep track of two programs alternately.

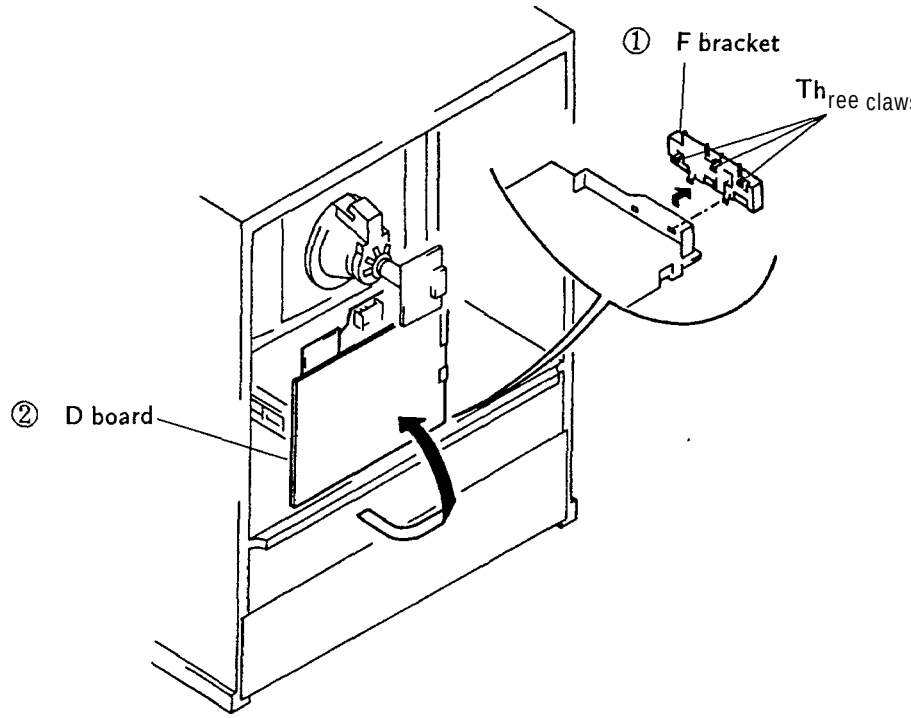
JUMP

SECTION 2
DISASSEMBLY

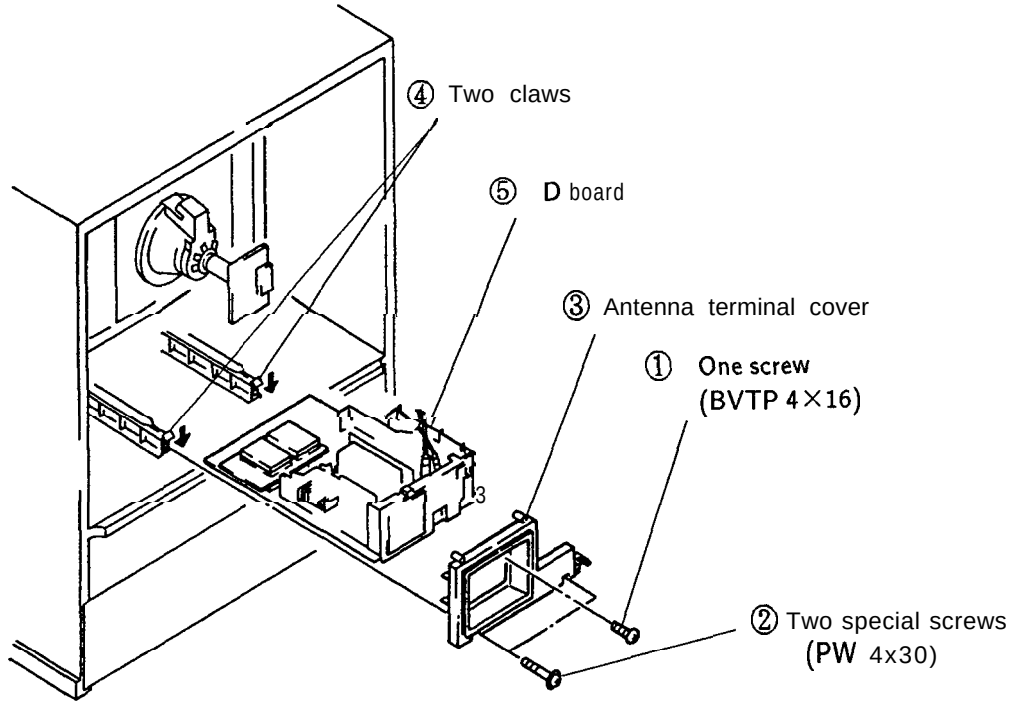
2-1. REAR PLATE REMOVAL



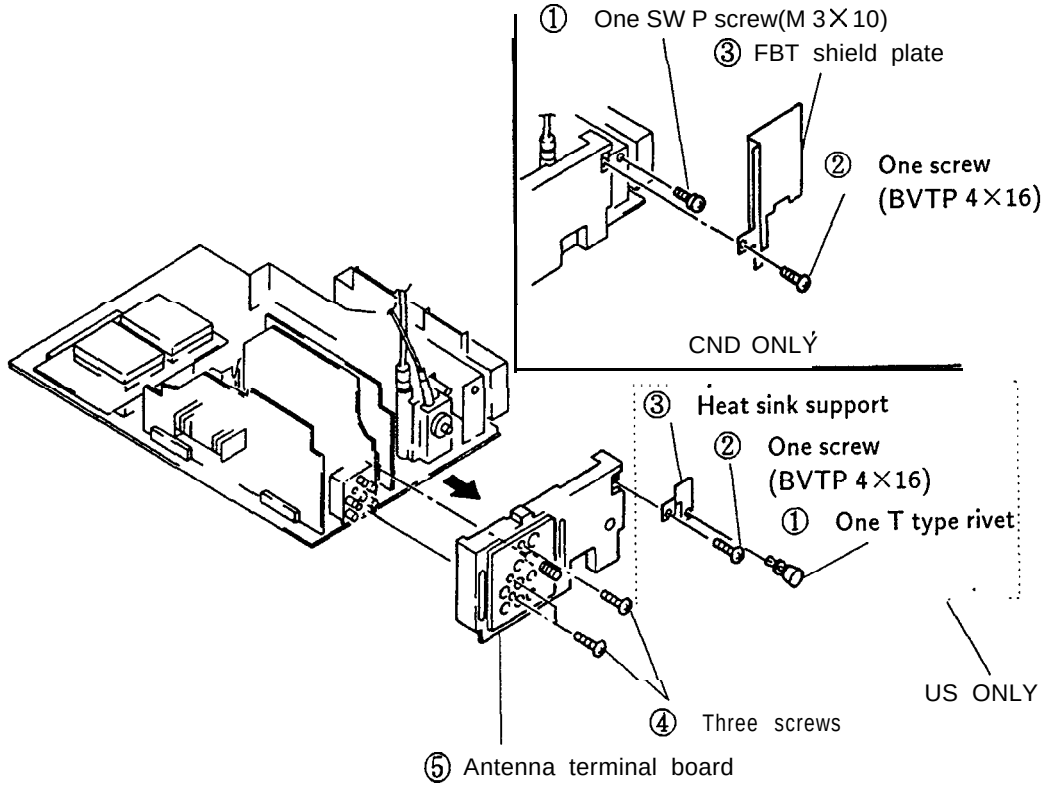
2-2. SERVICE POSITION



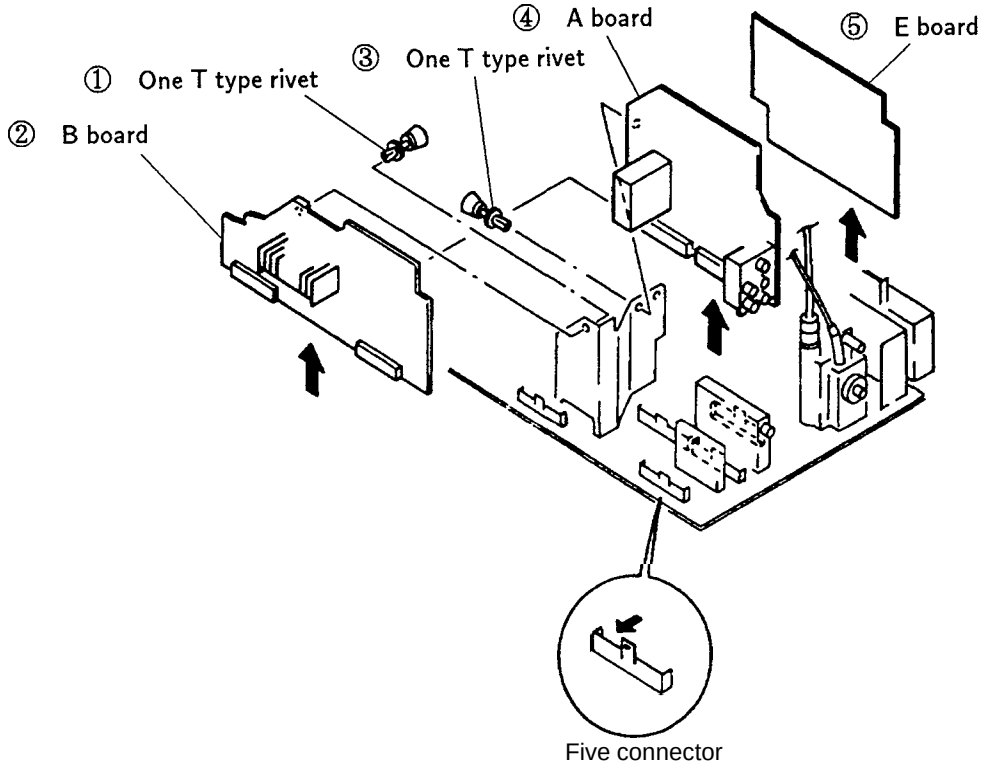
2-3. D BOARD REMOVAL



2-4. ANTENNA TERMINAL BOARD REMOVAL

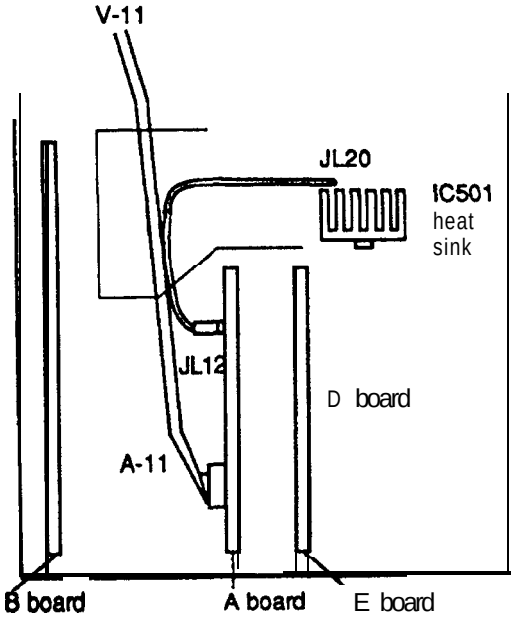


2-5. **B,A** AND E BOARDS REMOVAL



2-6. HOW TO IMPROVE INTERLACE

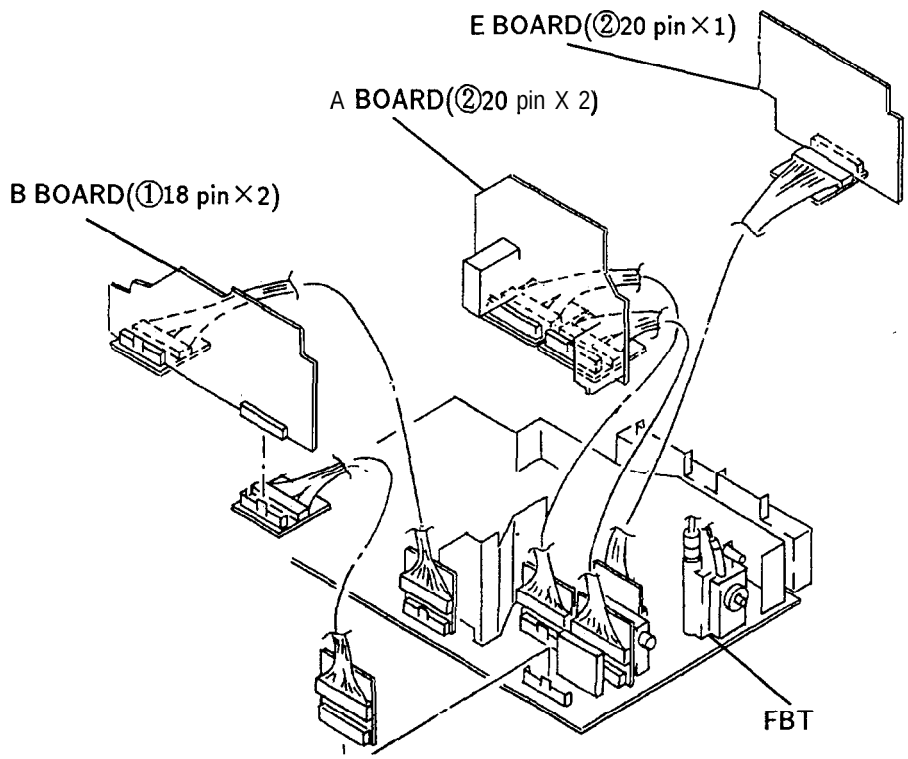
Fastening Jumper Connector Wire between JL 12(A board)and JL 20(D board).



Fasten the wire to eriminate slack between JL 20 and JL 12 with a purse lock.

2-7. **B,A** AND E BOARDS SERVICE POSITION

※ KEEP THE EXTENDED BOARDS FURTHER AWAY FROM FBT TO PREVENT INTERFERENCE.



EXTENSION CABLES FOR **A,B** AND E **BOARD**

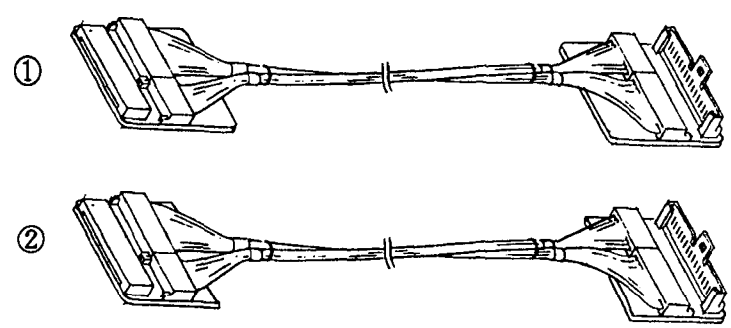
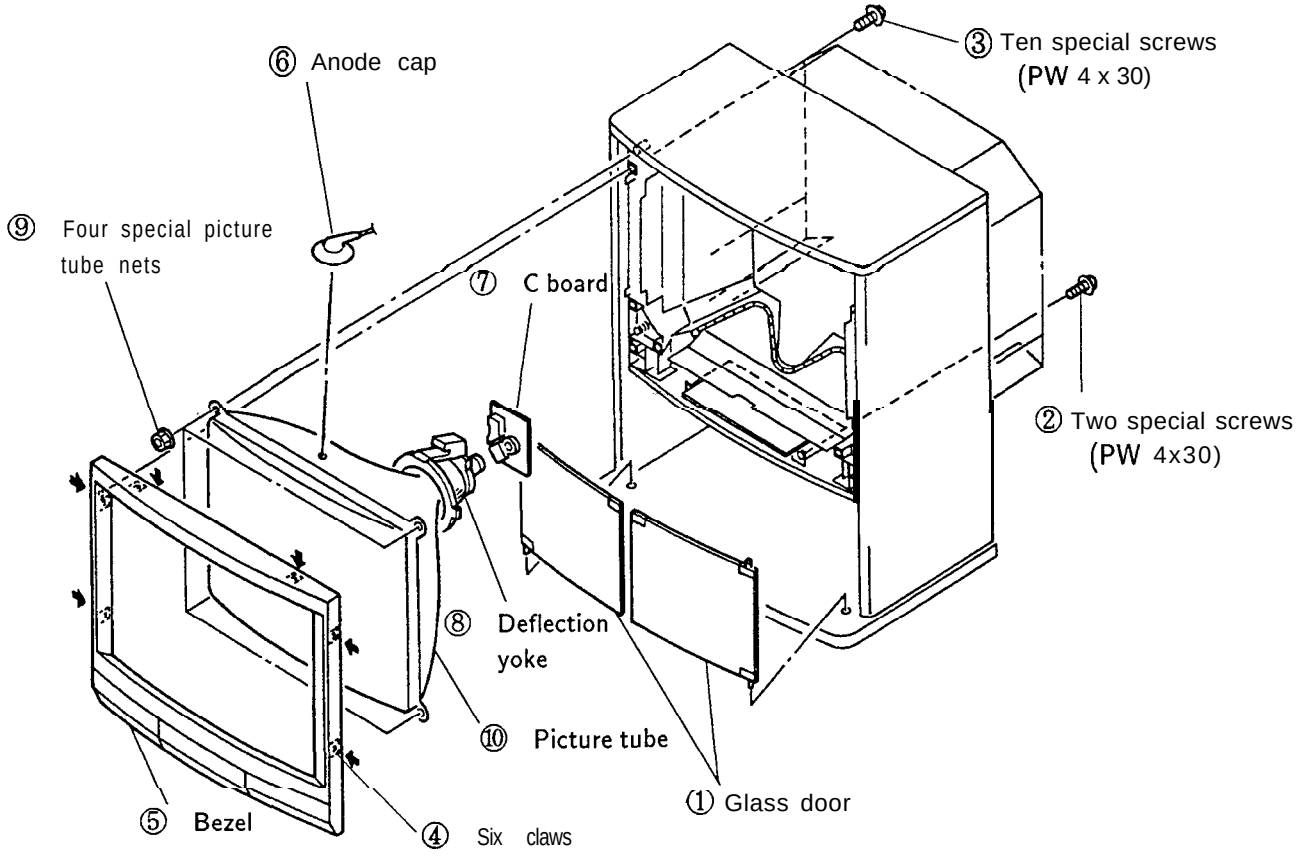


FIG	DISCLIPTION	QTY	USE FOR	PART NO
①	18 PIN-18 PIN(H 1,H 2)	2	B BOARD	3-702-541-01
②	20 PIN-20 PIN(H 3,H 4)	2	A BOARD	3-702-542-01
		1	E BOARD	3-702-542-01

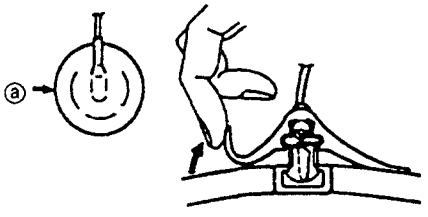
2-8. PICTURE TUBE REMOVAL


⑥ Anode cap
③ Ten special screws (PW 4 x 30)
⑨ Four special picture tube nets
⑦ C board
② Two special screws (PW 4x30)
⑧ Deflection yoke
⑩ Picture tube
① Glass door
⑤ Bezel
④ Six claws

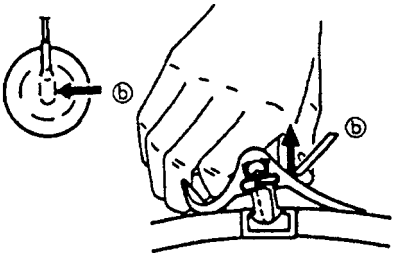
. REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT chield or carbon painted on the CRT, after removing the anode.

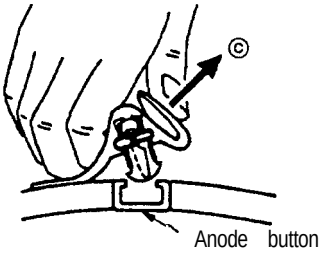
. REMOVING PROCEDURES



① **Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.**



② **Using a thumb pull up the rubber cap firmly in the direction indicated by, the arrow ⓑ.**



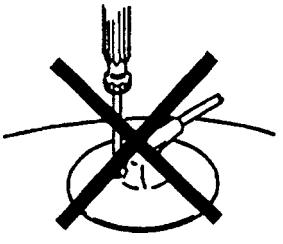
③ **When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.**

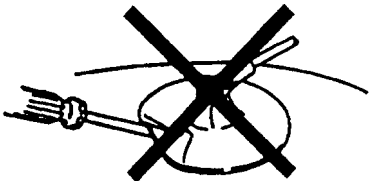
. HOW TO HANDLE AN ANODE-CAP

① **Don't hurt the surface of anode-caps with sharp shaped material!**

② **Don't press the rubber hardly not to hurt inside of anode-caps!**
A material fitting called as shatter-hook terminal is built in the rubber.

③ **Don't turn the foot of rubber over hardly!**
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- **The following adjustments should be made when a complete realignment is required or a new picture tube is installed.**
- **These adjustments should be performed with'rated power supply voltage unless otherwise noted.**

Controls and switch should be set as follows unless otherwise noted :

PICTURE control . . . . . RESET

BRIGHTNESS control . . . . . center

Perform the adjustments in order as follows :

1. **Beam Landing**
2. **Convergence**
3. **Focus**
4. **White Balance**

Note : Test Equipment Required.

1. **Color-bar/Pattern Generator**
2. **Degausser**
3. **Oscilloscope**

3-I. BEAM LANDING

Preparation :

- Feed in the white pattern.
- Before starting, degauss the entire screen.

1. Turn on set power supply and receive an all-white signal.
2. Evenly degauss the entire screen.
3. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Figure 3-l.
4. Set BKG VR **R** to maximum and set **B** and G to minimum.
5. Move the deflection yoke back, and adjust the purity control so that **R** is in the center and G and **B** are at the sides, evenly. (Figure 3-2.)
6. Move the deflection yoke forward so that the entire screen is red.
   * If the deflection yoke is pushed all the way to the CRT then moved slightly back, landing adjustment is easier.
7. Substitute G , then **B** for **R** in step 4 and check landing.
8. Rotate **R** , G and **B** once each and check landing.
9. When landing is not right, adjust the purity control and use magnets as shown in Figure 3-3. Then repeat steps 7 and 8.
10. When a magnet is used, be sure to perform step 2, and tighten deflection yoke mounting screw loosely.

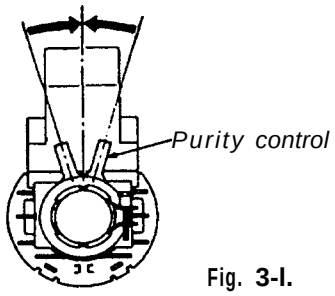


Fig. 3-l.

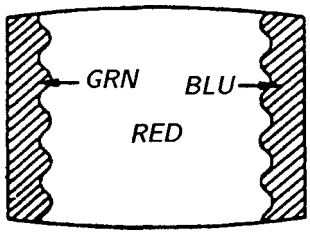


Fig. 3-2.

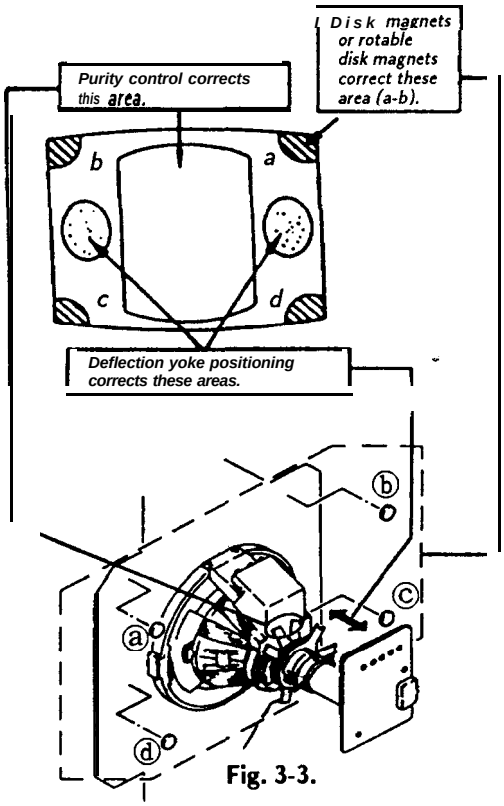
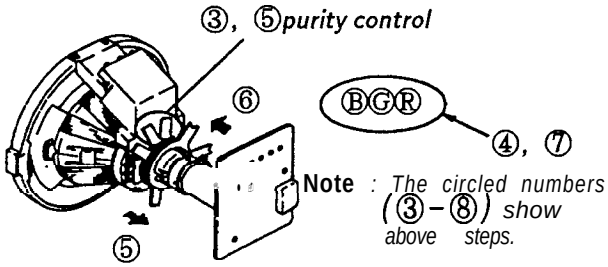


Fig. 3-3.



Note : *The circled numbers (③–⑧) show above steps.*

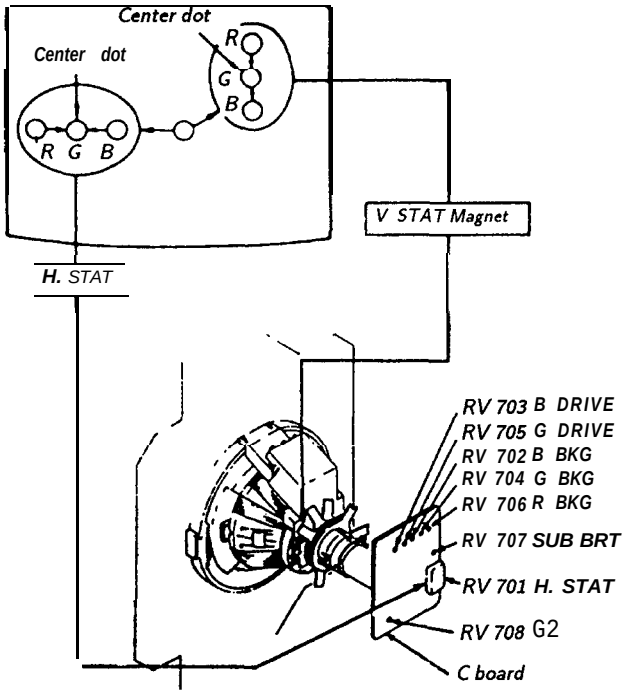
3-2. CONVERGENCE

Preparation :

- Before starting, perform FOCUS, H. SIZE, V. SIZE and V. LIN adjustments.
- Set BRIGHTNESS control to fully counterclockwise.
- Feed in the dot pattern.

(1) **Horizontal and Vertical Static Convergence**

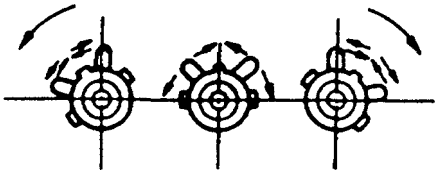
1. Adjust H. STAT VR to coincide red, green and



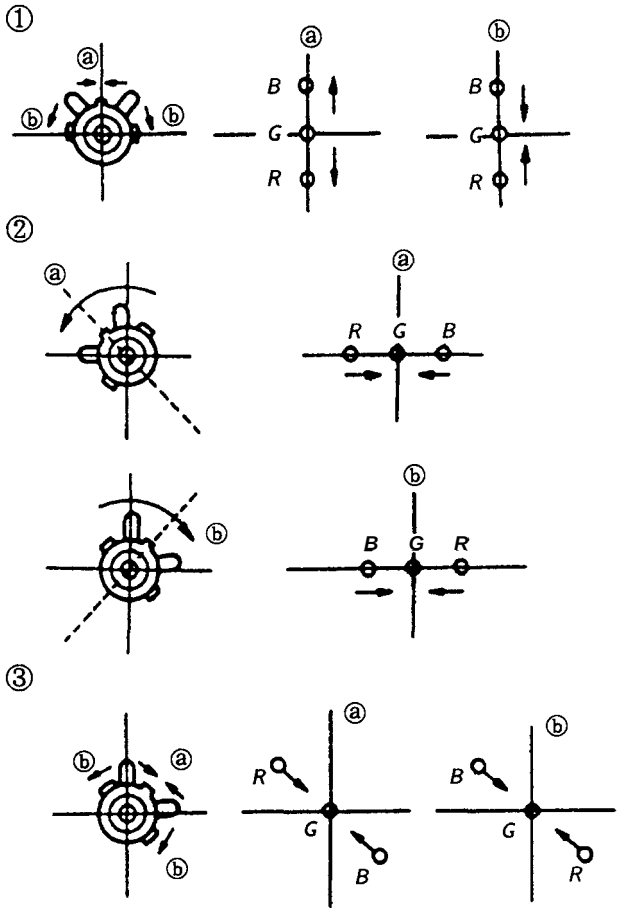
blue dots on the center of screen (Horizontal movement)

2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen (Vertical movement)
3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)

. Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.

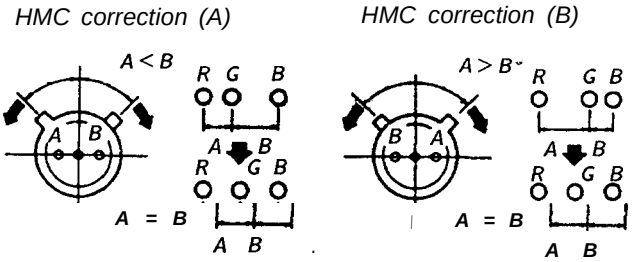


4. When the V. STAT magnet is moved in the direction of arrow ⓐ and ⓑ . Red, Green and Blue dots move as shown below.

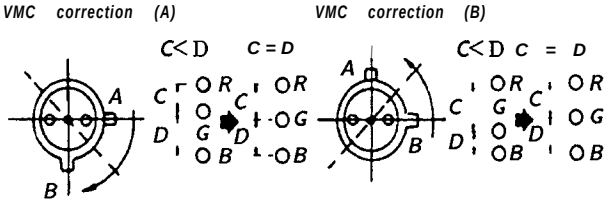


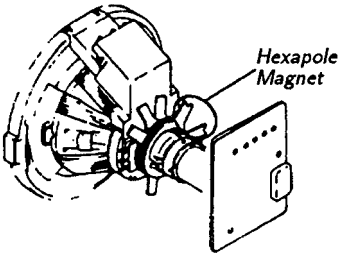
• HMC and VMC correction for Hexapole Magnet.

1. HMC (Horizontal, Mis. convergence) correction and motion of the Electron Beam with the Hexapole Magnet.



2. VMC (Vertical, Mis. convergence) correction and motion of the Electron Beam with the Hexapole Magnet.





(2) Dynamic Convergence Adjustment

Preparation :

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

1. Loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown in Fig. 3-4.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.

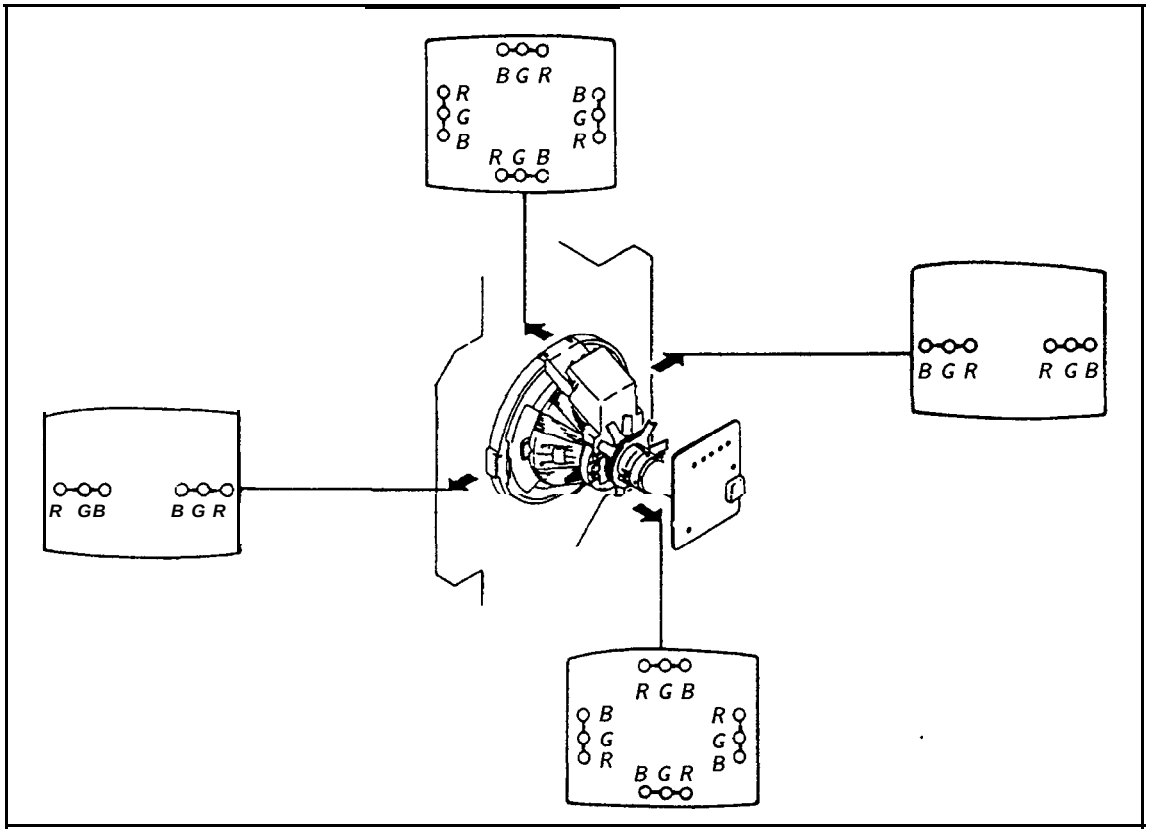
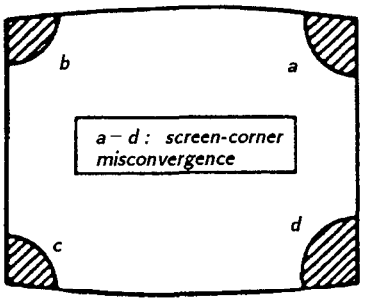


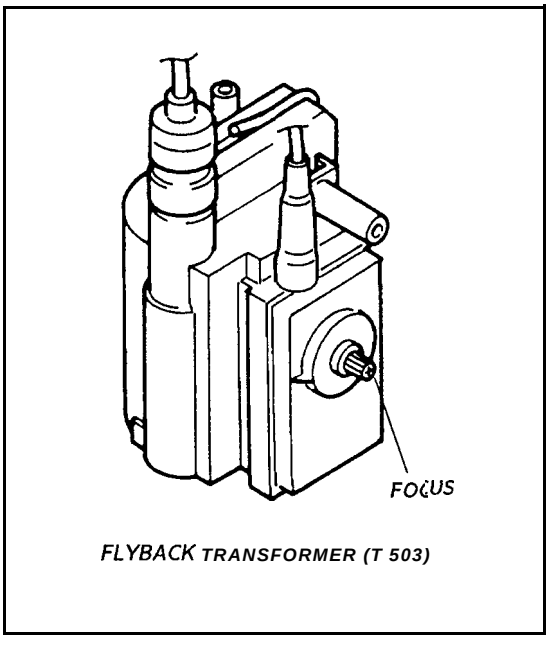
Fig. 3-4.

(3) Screen-corner Convergence

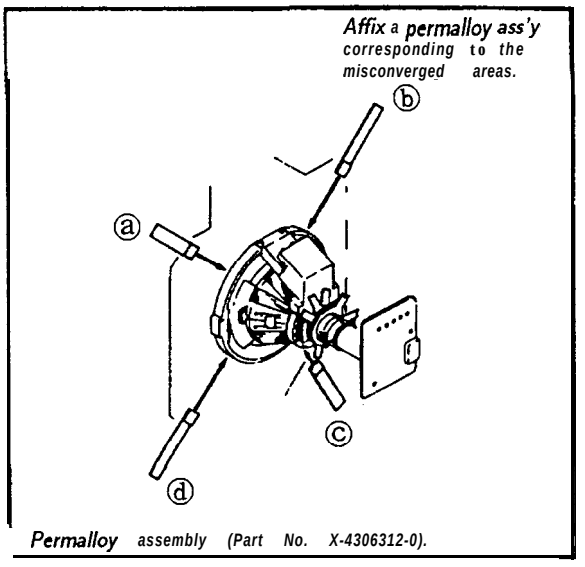


3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for a best focus.



FLYBACK TRANSFORMER (T 503)



Permalloy assembly (Part No. X-4306312-0).

3-4. WHITE BALANCE

- Input dot signal from pattern generator.
- PICTURE button 80%

BRIGHTNESS control . . . . . click position

[SCREEN (G 2)]

1. Adjust BKG VRs (RV 702, RV 704, and RV 706) so that voltages on the red, green and blue cathodes are 180 V dc with an oscilloscope as shown in Fig. 3-5.

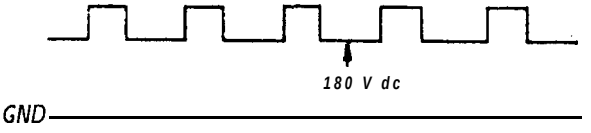


Fig. 3-5.

2. Observe the screen and adjust RV 708 (SCREEN) to obtain the faintly visible background of dot signal. Note the color that first becomes visible by turning SCREEN VR.
   Do not turn a BKG control for this color.

[WHITE BALANCE]

1. Input entirely white signal from pattern generator.
2. Set the PICTURE button to obtain the faintly visible raster on the screen.
3. Observe the screen and adjust the other two BKG VRs for best white balance.
4. Set the PICTURE button at maximum.
5. Observe the screen and adjust the DRIVE VRs (RV 703, RV 705) for best white balance.
6. Repeat steps 2 through 5 several times.

SECTION 4
SAFETY RELATED ADJUSTMENTS

☒ R542 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).

IC601,Q605,Q606,C536,R542,R546,R620,R621,R629, R630,R639,PM501

①

1. Preparation before confirmation

1) Remove R620 on the D board and connect a variable resistor (RV1 : about 20kΩ) between pin ① of IC601 and B+ line.
2) Supply 120±2.0V AC to with variable auto-transformer.

2. Hold-down operation confirmation

1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1650 ±20 μA with PICTURE and BRIGHT etc controls.
2) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 144.0V DC whereby the raster disappears during operation of hold-down circuit.

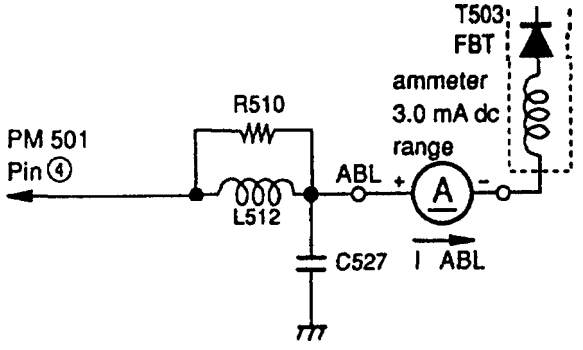
NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to 150±20μA with PICTURE and BRIGHT etc controls.
4) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 148.0V DC whereby the raster disappears during operation of hold-down circuit.

NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R542 (a component marked with ☒).



❑ R543 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).

IC601,Q605,Q606,D507,C535,C536,C639,R520,R543, R546,R620,R621,R629,R630,T503,PM501

②

1. Preparation before confirmation

1) Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHT controls to maximum.
2) Confirm that voltage of the check terminal of pin① of D-15 is more than 115.0V DC when the set is operating normally with 120 ±2.0V AC supply.

2. Hold-down operation confirmation

1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1650 ±20 μA with PICTURE and BRIGHT etc controls.
2) Apply DC voltage of over 130V DC gradually to the check terminal of pin① of D-15 via 1T40 from the DC stabilized power source.
Confirm that the minimum voltage is less than 140.0V DC whereby the raster disappears during operation of hold-down circuit.

NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to 150± 20μA with PICTURE and BRIGHT etc controls.
4) Apply DC voltage of over 130V gradually to the check terminal of pin① of D-15 via 1T40 from the DC stabilized power source.
Confirm that the minimum voltage is less than 140.5V DC whereby the raster disappears during operation of hold-down circuit.

NOTE : When the hold-down circuit starts operating, switch OFF' the POWER of the set immediately.

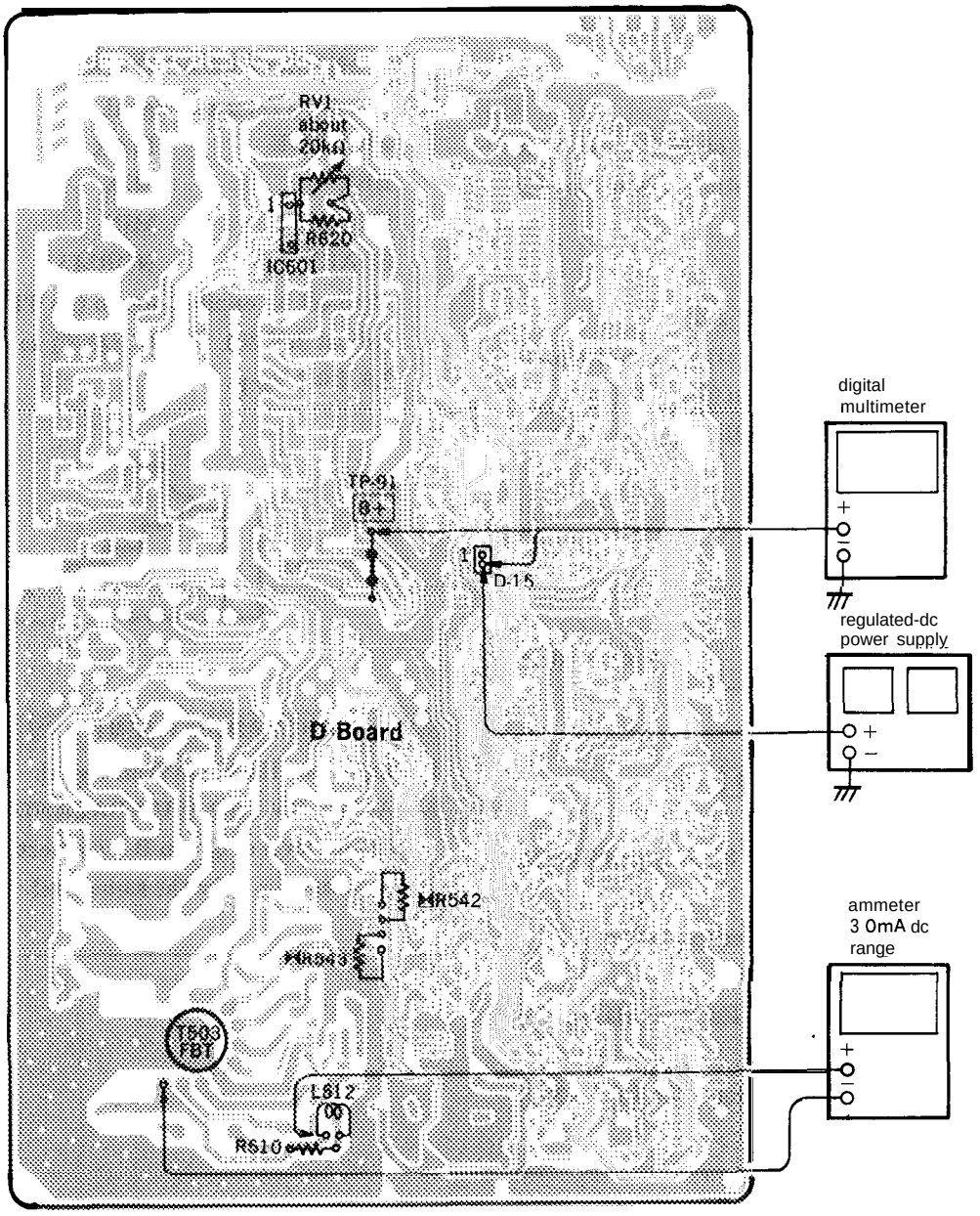
3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R543 (a component marked with ☒).

B+ VOLTAGE CONFIRMATION]

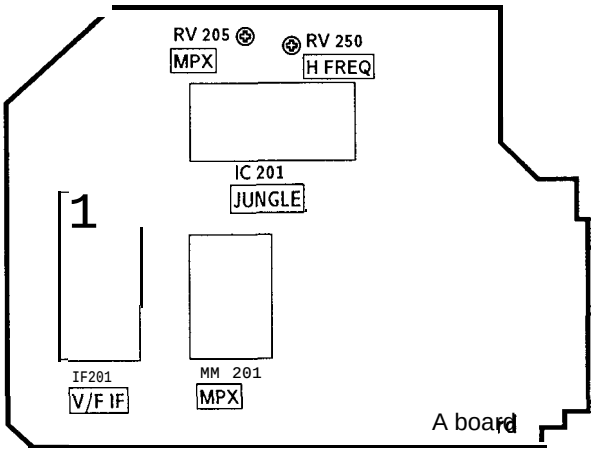
The following adjustments should always be performed when replacing IC601 and R620.

1) Supply 130±2%V AC to with variable auto-transformer.
2) Receive entirely monoscope signal.
3) Set the PICTURE control and the BRIGHT controls in to initial reset.
4) Confirm the voltage of TP-91 is less than 137.0V DC.
5) If step 4) is not satisfied, replace IC601 and R620 repeat above steps.



SECTION 5
CIRCUIT ADJUSTMENTS

5-I. A BOARD ADJUSTMENTS

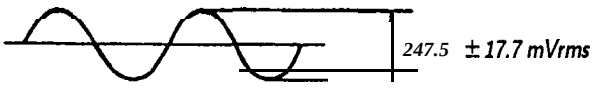


RF AGC ADJUSTMENT

1. Receive an off-air signal.
2. Adjust AGC VR (AGC VR of IF' 201) so that snow noise and cross-modulation just disappear from the picture.

MPX LEVEL ADJUSTMENT (RV 201)

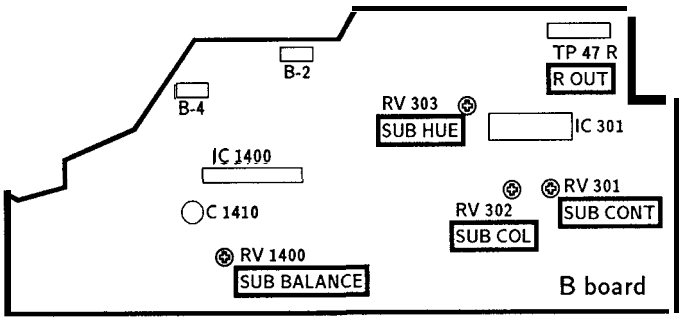
1. Receive 400 Hz (100% modulation) sound signal.
2. Connect an RMS meter to pin ⑪ of MM 201.
3. Adjust RV 201 so that the MPX level is 247.5 ± 17.7 mVrms.



H. FREQ ADJUSTMENT (RV 250)

1. Receive an off air signal.
2. Short circuit between TP (Y SYNC) and TP (12 V) with a jumper wire.
3. Connect the frequency counter to pin@ of connector A-3.
4. Adjust RV 250 for 15.734 kHz t-60 Hz on the frequency counter.
5. Disconnect a jumper wire from TP (Y SYNC) and TP (12 V).

5-2. B BOARD ADJUSTMENTS

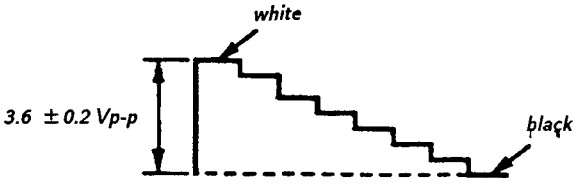


SUB CONTRAST ADJUSTMENT (RV 301)

1. Receive a color-bar signal.

PICTURE	MAX
BRT	MIN
COLOR	MIN
SHARP	NORMAL

2. Connect an oscilloscope to the TP 47 R(R OUT).
3. Adjust RV 301 (SUB CONT) so that voltage is 3.6 ±0.2 Vp-p.

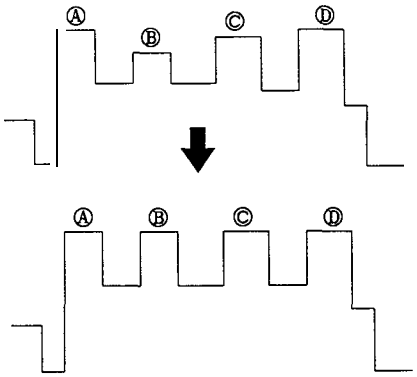


SUB BALANCE ADJUSTMENT (RV 1400)

1. Input 400 Hz 200 mVrms signal.
2. Adjust RV 1400 (SUB-BALANCE) so that the output level of ② pin B-4 connector and ① pin B -2 connector to be the same level.

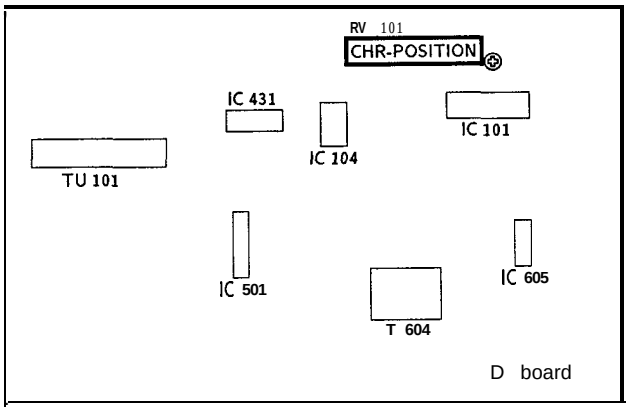
SUB COLOR AND SUB HUE ADJUSTMENTS (RV 302,303)

1. Receive a color bar signal.
2. Set PICTURE and BRT to normal.
3. Connect an oscilloscope to the TP 47 R (B OUT).
4. Adjust RV 302(SUB-COL)and RV 303 (SUB-HUE) to be the same level.



Ⓐ=Ⓓ
Ⓑ=Ⓒ

5-3. D BOARD ADJUSTMENTS



[CHARACTER POSITION (RV 101)]

1. Receive a color-bar signal.
2. Set the PICTURE control to maximum setting and set the BRIGHTNESS control to center click position.
3. Press the PICTURE control button until this picture level becomes maximum.
4. Adjust RV 101 as shown in Fig. 1.

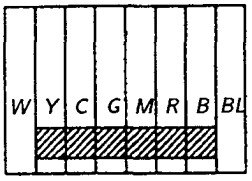
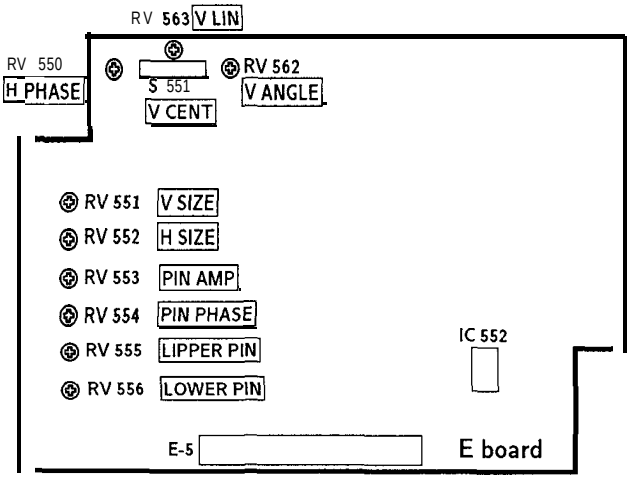
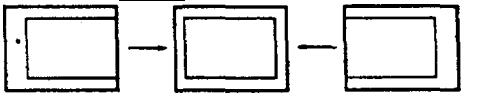


Fig. 1

5-4. E BOARD ADJUSTMENTS

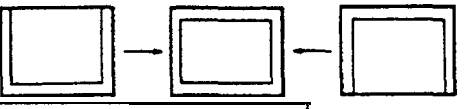


H. PHASE (HORIZONTAL PHASE) (RV550)



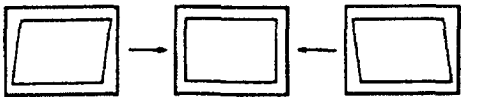
H. SIZE (HORIZONTAL SIZE) (RV552)

V. CENT (VERTICAL CENTER) (S551)



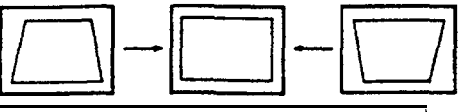
V. SIZE (VERTICAL SIZE) (RV551)

V. ANGLE (VERTICAL ANGLE) (RV562)

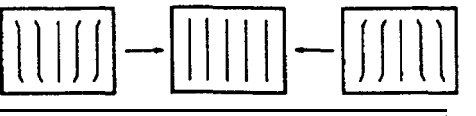


PIN. AMP (PINCUSHION AMPLIFIER) (RV553)

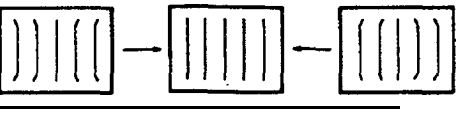
PIN. PHASE (PINCUSHION PHASE) (RV554)



PIN. COR (PINCUSHION CORRECT) (RV555)



CORNER. COR (CORNER CORRECT) (RV556)

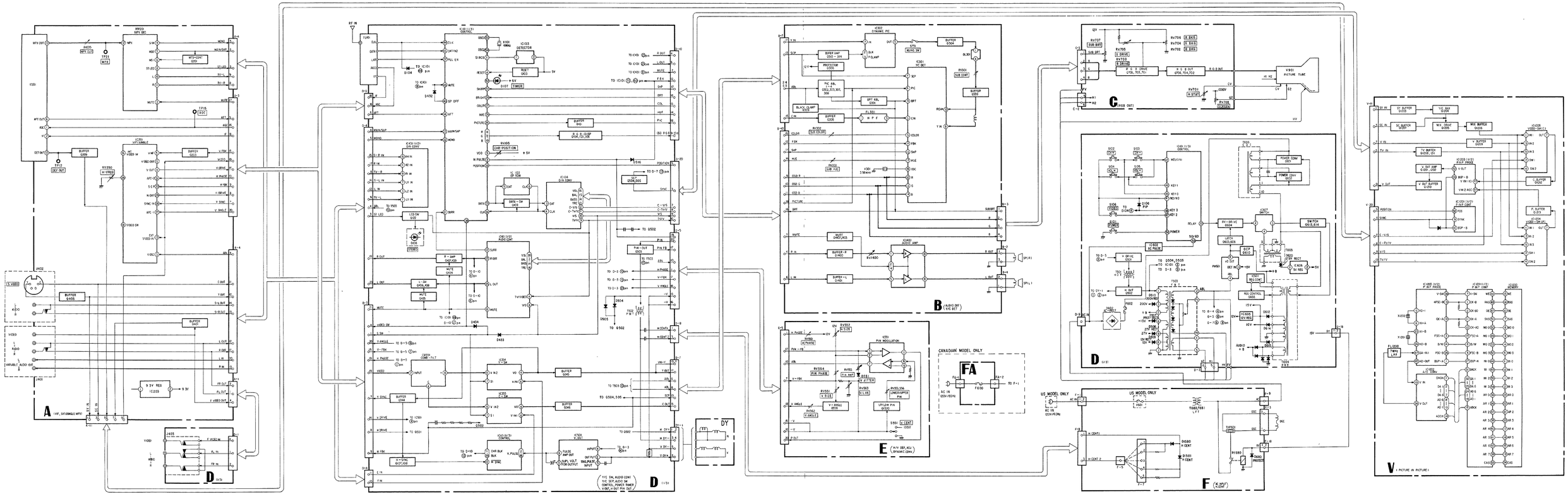


V.LIN (VERTICAL LINEARLITY) (RV 563)

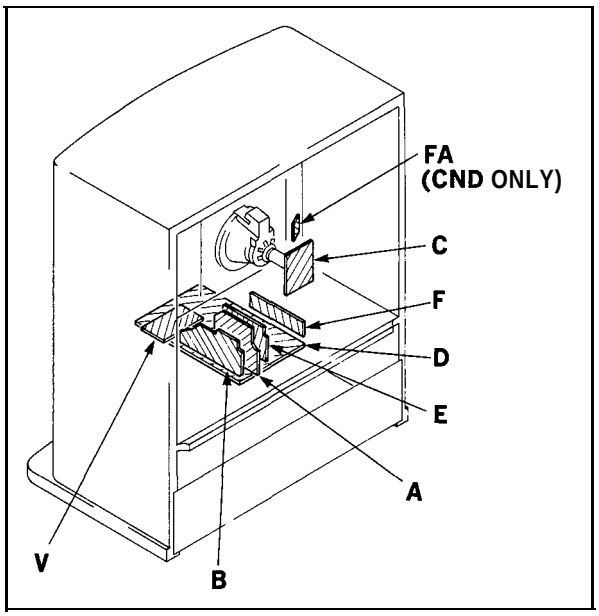
KV-27TW75/27TW76 RM-Y102 KV-27TW75/27TW76 RM-Y102

SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM



6-2. CIRCUIT BOARDS LOCATION



6-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W
- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- △: internal component.
- : panel designation, and adjustment for repair.
- Allvariableand adjustable resistors havecharacteristic curve B, unless otherwise noted.
- The components identified by ❑ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ❑ and repeat the adjustment until the specified value is achieved.
  (Refer to R542 and R543 on page28-30in the Service Manual.)
- When replacing the part in below table be sure to parform the related adjustment.

Part replaced (◪)	Adjustment (❑)
IC601, PM501, Q605, Q606, C536, R639, R630, R629, R621, R620, R546, R542,	R542 (HOLD-DOWN)
IC601, PM501, Q606, Q605, D507, T503, C639, C536, C535, R630, R629, R621, R620, R543, R546, R520	R543 (HOLD-DOWN)

- All voltages are in V
- Voltagearedcwith respecttoground unless otherwise noted
- Readings are taken with a 4 0 MΩ digital multimeter
- Readings are taken with a color-bar signal input
- Voltage variations may be noted due to normal production tolerance
- B+ bus
- signal path

Reference information

RESISTOR : RN METAL FILM
: RC SOLID
. FPRD NONFLAMMABLE CARBON
. FUSE NONFLAMMABLE FUSIBLE
. RW NONFLAMMABLEWIREWOUND
R S NONFLAMMABLE METALOXIDE
' RB NONFLAMMABLE CEMENT
COIL : LF-8L MICRO INDUCTOR
CAPACITOR : TA TANTALUM
: PS STYROL
: PP POLYPROPYLENE
: PT MYLAR
: MPS METALIZED POLYESTER
. MPP METALIZED POLYPROPYLENE
: ALB BIPOLAR
: ALT HIGH TEMPERATURE
: ALR HIGH RIPPLE

Note:
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:
Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

KV-27TW75/27TW76
RM-Y102

A [JUNGLE, VIF/SIF, MPX]

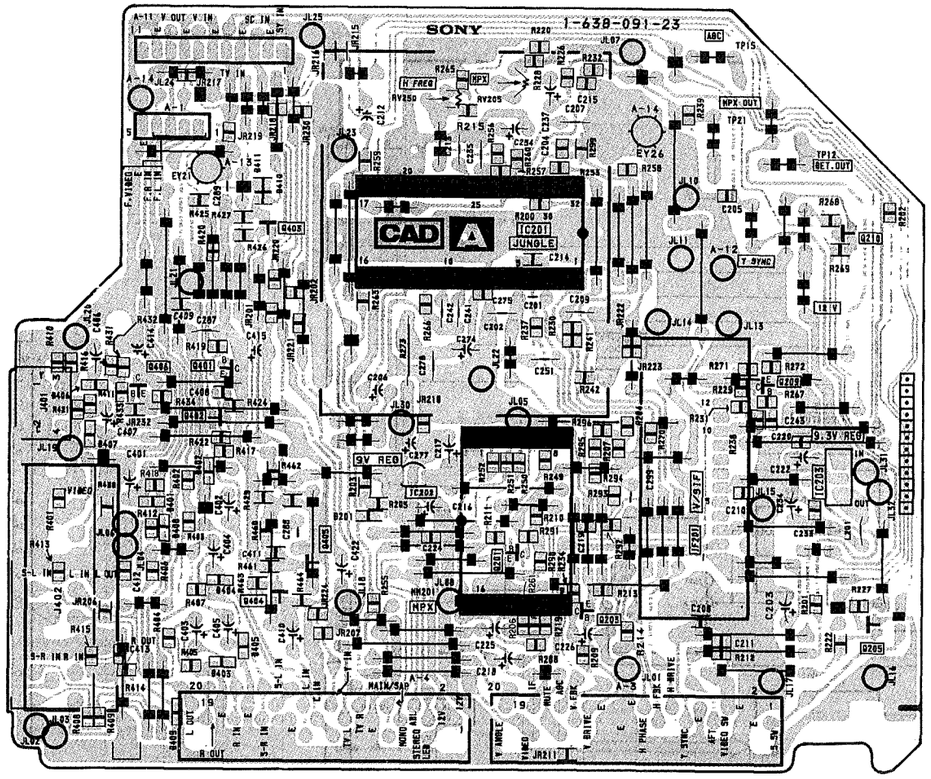
E [H/V DEF. ADJ.]

B [Y/C → RGB AUDIO OUT]

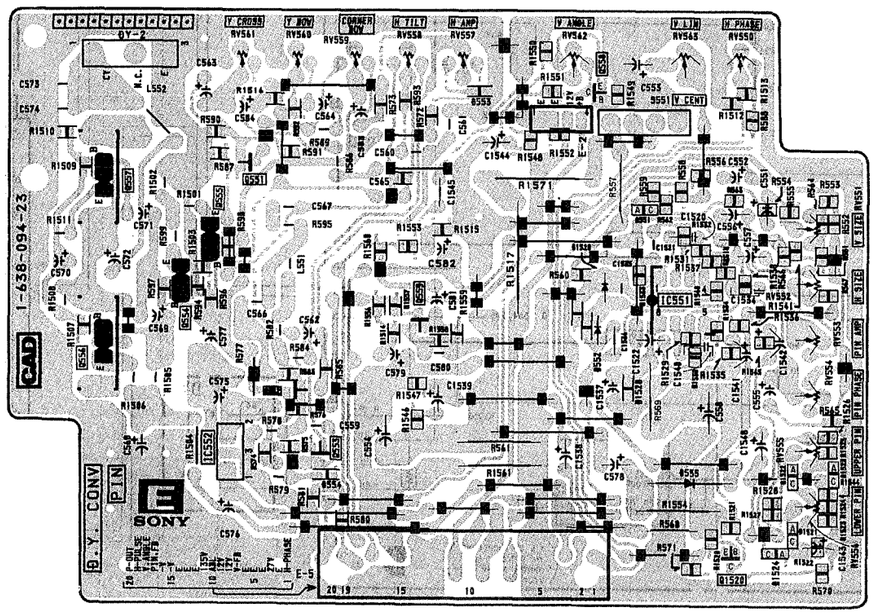
F [AC INPUT H. CENT]

FA [AC OUTPUT]

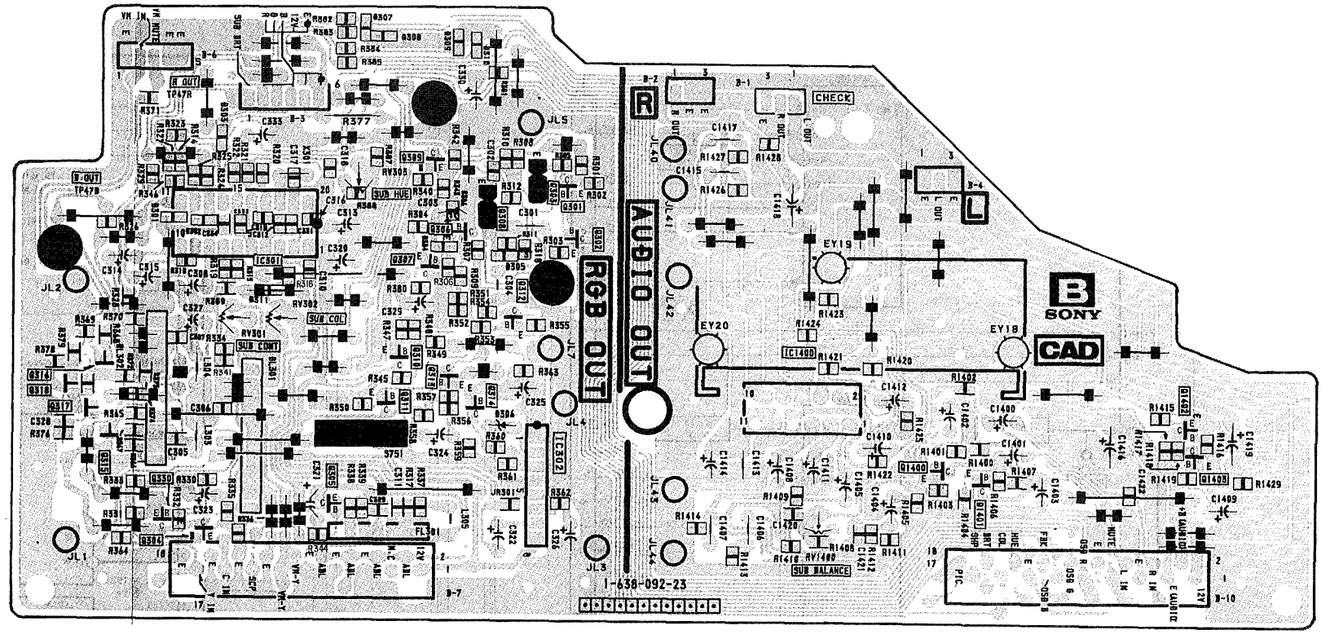
— A Board —



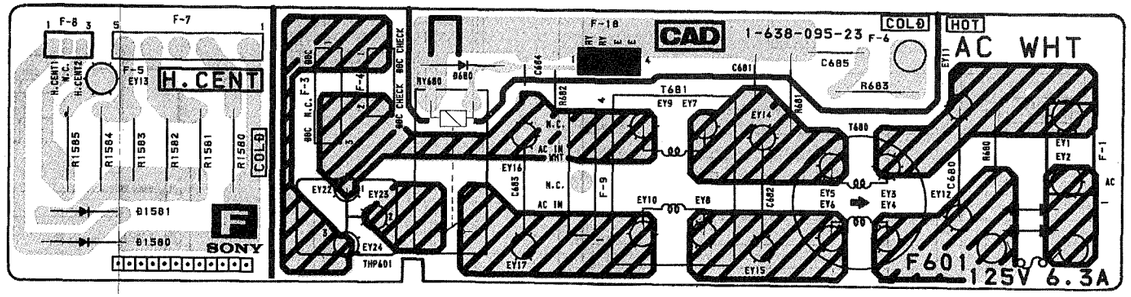
— E Board —



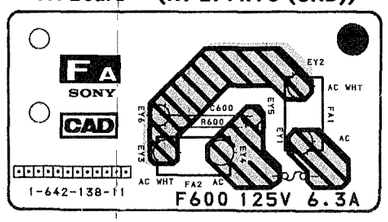
— B Board —

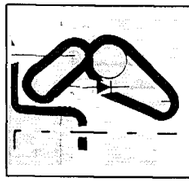


— F Board —

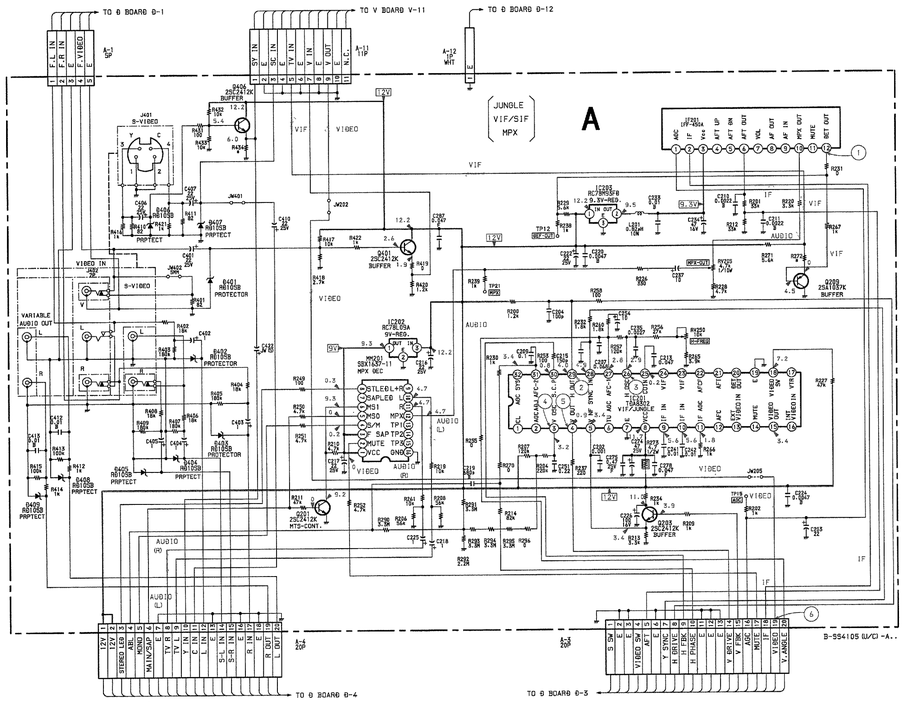


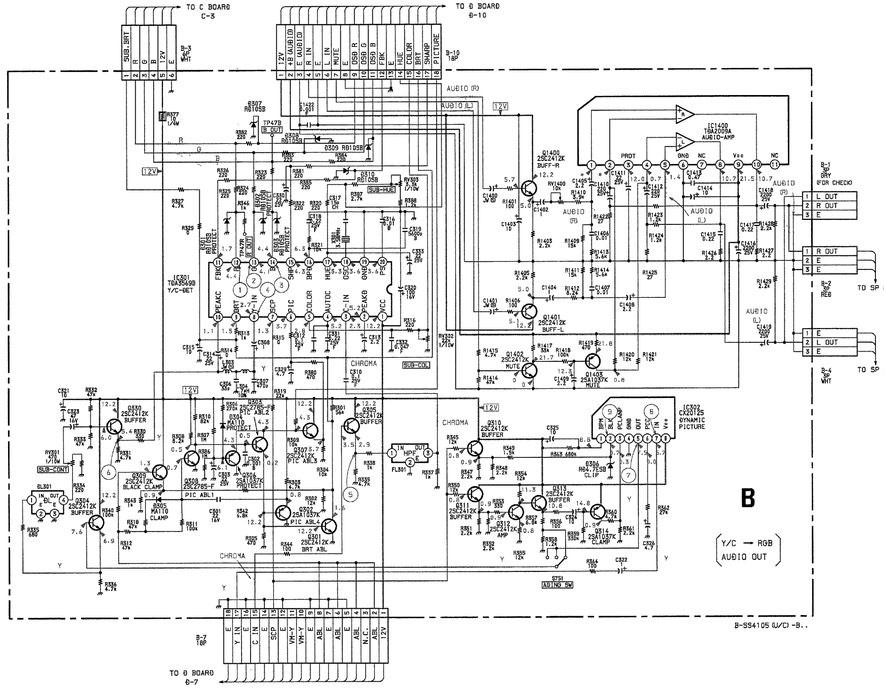
— FA Board — (KV-27TW75 (CND))



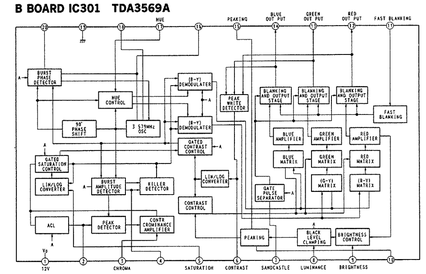


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

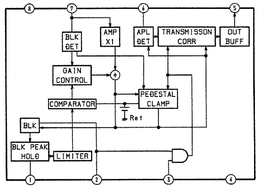




B BOARD IC301 TDA3569A



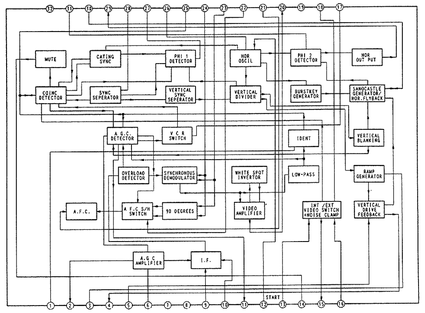
B BOARD IC302 CX20125



— B Board —

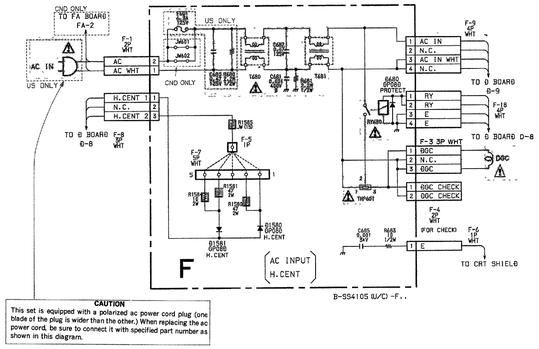
① 6 Vp-p (H)	② 4.8 Vp-p (H)	③ 4.8 Vp-p (H)
④ 0.4 Vp-p (H)	⑤ 1.9 Vp-p (H)	⑥ 0.45 Vp-p (H)
⑦ 1 Vp-p (H)	⑧ 1.1 Vp-p (H)	⑨ 4.4 Vp-p (H)

A BOARD IC201 TDA8302



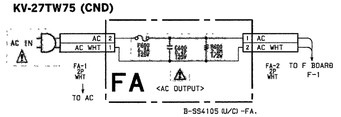
— A Board —

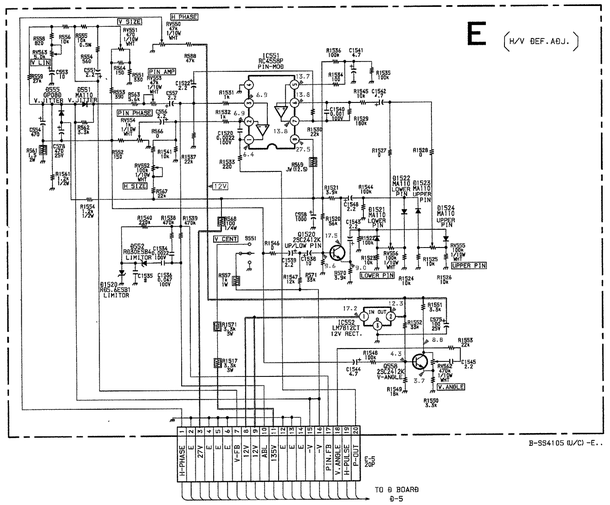
① 1.95 Vp-p (H)	② 8 Vp-p (H)	③ 2 Vp-p (H)
④ 1.8 Vp-p (V)	⑤ 2.1 Vp-p (V)	⑥ 2 Vp-p (H)

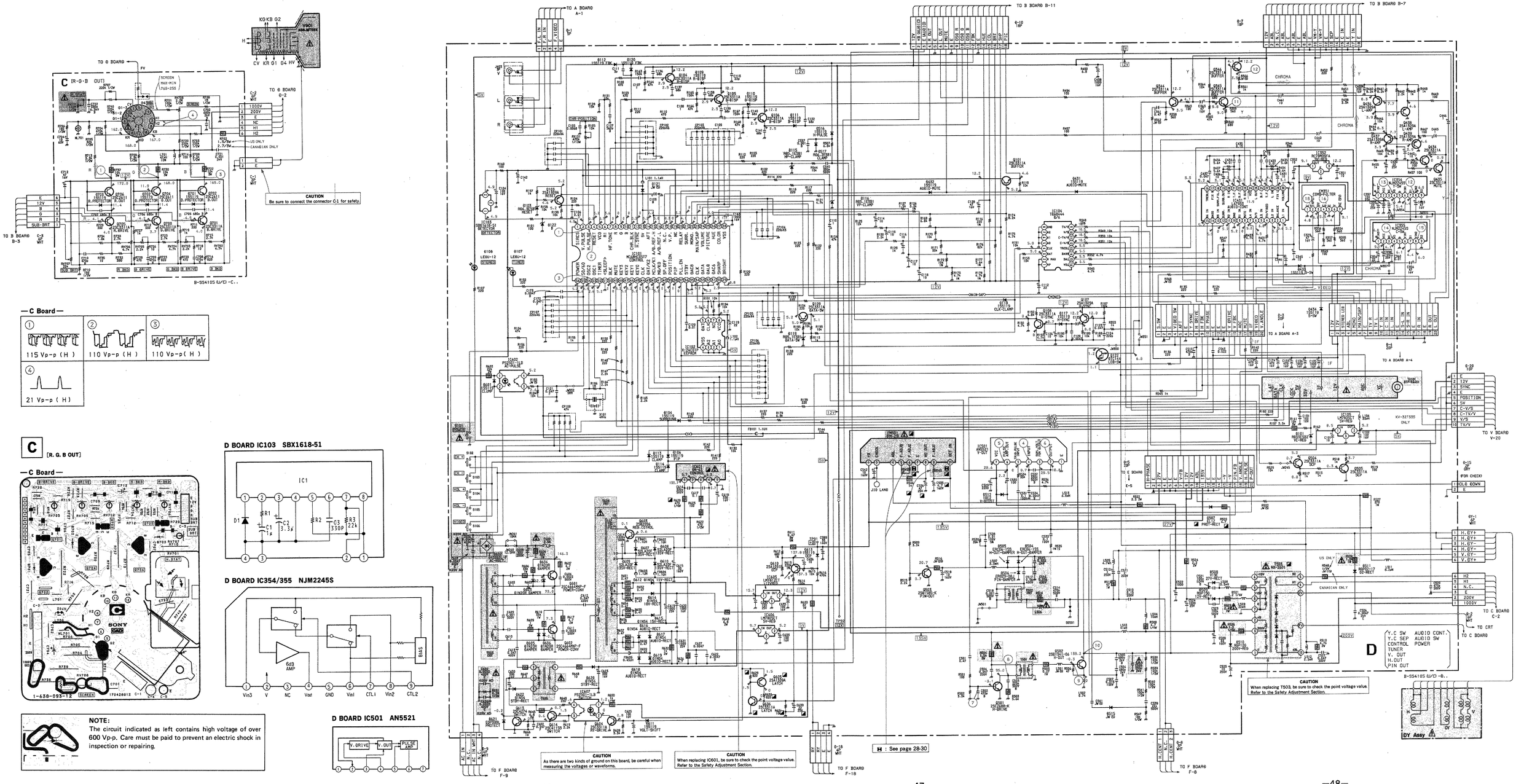


CAUTION
This set is equipped with a polarized ac power cord plug (one blade of the plug is wider than the other.) When replacing the ac power cord, be sure to connect it with specified part number as shown in this diagram.

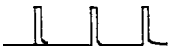
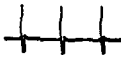
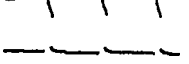
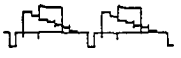
KV-27TW75 (CND)





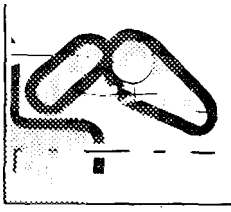

C (R-G-B OUT)
TO G BOARD
TO G BOARD G-2
TO B BOARD B-5
CAUTION
Be sure to connect the connector C1 for safety.
B-554105 (U/C) -C..
— C Board —
115 Vp-p (H)
110 Vp-p (H)
110 Vp-p (H)
21 Vp-p (H)
C [R. G. B OUT]
— C Board —
1-638-093-12
D BOARD IC103 SBX1618-51
IC1
D BOARD IC354/355 NJM2245S
6dB AMP
Vin3 V NC Vout GND Vin1 CTL1 Vin2 CTL2 BIAS
D BOARD IC501 AN5521
V. DRIVE V. OUT PULSE AMP
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.
TO A BOARD A-1
TO B BOARD B-11
TO B BOARD B-7
TO A BOARD A-3
TO A BOARD A-4
TO V BOARD V-20
TO E BOARD E-5
TO C BOARD C-2
TO CRT
TO C BOARD
TO F BOARD F-9
TO F BOARD F-18
TO F BOARD F-8
TO DY
CAUTION
As there are two kinds of ground on this board, be careful when measuring the voltages or waveforms.
CAUTION
When replacing IC601, be sure to check the point voltage value. Refer to the Safety Adjustment Section.
CAUTION
When replacing T503, be sure to check the point voltage value. Refer to the Safety Adjustment Section.
H : See page 28-30
D
Y.C SW
Y.C SEP
CONTROL
TUNER
V. OUT
H.OUT
PIN OUT
AUDIO CONT.
AUDIO SW
POWER
DY Assy
CHROMA
CHROMA
CHROMA
CHROMA
KV-32TS35 ONLY
US ONLY
CANADIAN ONLY
FOR CHECK
HOLD DOWN

-D Board-

①  4 . 7 Vp-p(V)	② 5 Vp-p (H)	③ 5 VP-P (4MHz)
④  3 . 5 Vp-p(V)	⑤  3.8 Vp-p (V)	⑥ 28 VP-P (V)
⑦ 7 VP-P (H)	⑧ 280 VP-P (H)	⑨ 18 VP-P (H)
⑩ 900 VP-P (H)	⑪ 1.9 VP-P (H)	⑫ 1.9 VP-P (H)
⑬  0.9 VP-P (H)	⑭ 1.9 Vp-p (H)	⑮ 0.95 Vp-p (H)
⑯ .95 VP-P (H)	⑰ 1.9 Vp-p (H)	⑱ 1.2 VP-P (H)

- D Board -

IC				VARIABLE RESISTOR	
IC101	B-3	Q101	B-5	D115	A 2	RV101	B-3
ICI 02	c-3	Q103	A2	D116	B-2		
IC103	CI	Q104	A-3	D117	A 8		
IC104	C-6	Q105	A-4	D118	B-5		
IC105	C 8	Q106	A 3	D119	c 5		
IC352	B-12	Q107	A.9	D120	A-4		
IC354	B 12	Q108	A-B	D413	A 8		
IC355	B 10	Q109	c 5	D432	B-4		
IC431	c-7	Q122	c-7	D433	C 8		
IC501	E-7	4344	A 9	D434	C 8		
IC601	E2	Q345	B-10	D504	G-9		
IC602	F2	Q346	B 10	D505	F-9		
IC605	E2	Q434	B 9	D506	G 9		
IC606	F-2	4435	B-10	D507	E-11		
IC607	F5	Q436	B 9	D508	E-11		
		4437	B 9	D509	E 11		
'RANSISTOR		Q438	B-9	D510	F 10		
		Q439	B 9	D511	F-10		
		Q501	G7	D512	E 8		
		Q502	G-10	D515	E 9		
		Q503	F-6	D516	B-5		
		4504	D.5	D517	c-5		
		Q505	D 5	D601	G 2		
		Q601	G-4	D602	G-2		
		Q602	G 6	D603	G 4		
		Q603	F-3	D604	G 5		
		Q604	E-6	D605	G-6		
		Q605	D-6	D606	G-6		
		Q606	D 6	D607	E 4		
		Q610	D.4	D608	E 4		
		Q613	F-6	D609	E-3		
		Q614	F6	D610	E 3		
				D611	E-6		
				D612	E-4		
				D613	D 4		
				D614	E 5		
				D615	E-5		
				D616	E 5		
				D617	E 5		
				D618	E-5		
				D619	E-6		
				D620	F-2		
				D621	F 5		
				D622	G 4		
DIODE							
D101	D 10						
D103	A-2						
D104	c 3						
D106	D 3						
D107	D 1						
D108	C-1						
D109	A 4						
D110	A.5						
D111	A 5						
D112	c.5						
D113	c 3						
D114	c 3						



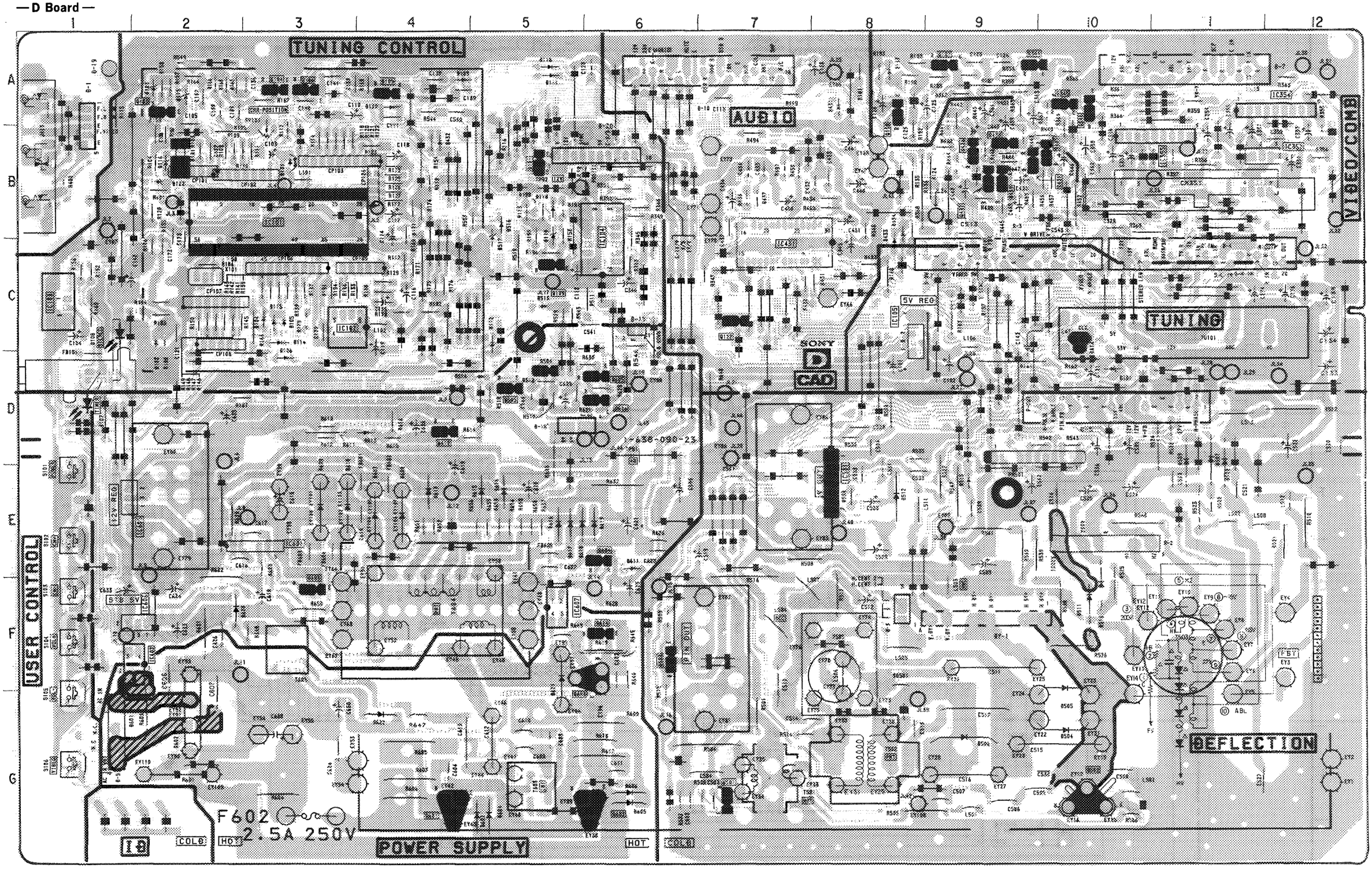
NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

KV-27TW75/27TW76
RM-Y102

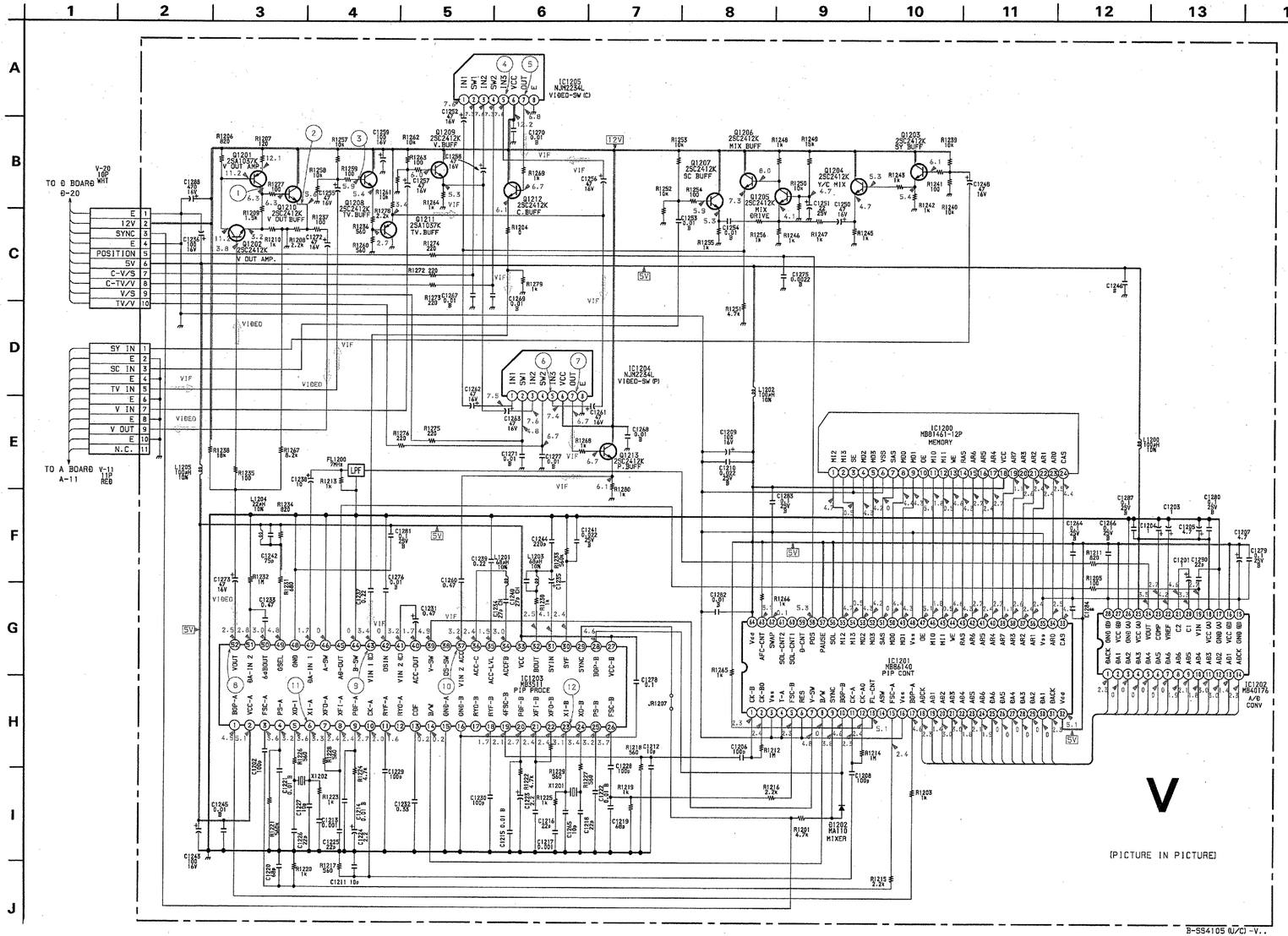
D [Y. C SW, AUDIO CONT, Y/C SEP, AUDIO SW, CONTROL, POWER, TUNER, V. OUT, H. OUT, PIN OUT]

— D Board —

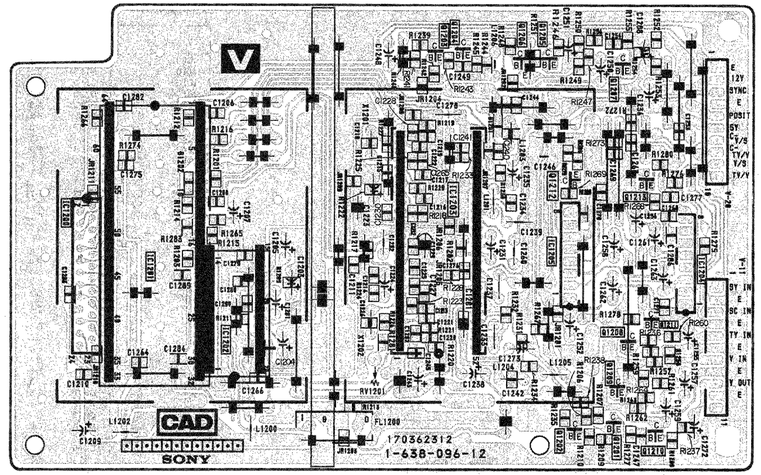


KV-27TW75/27TW76
RM-Y102

KV-27TW75/27TW76
RM-Y102



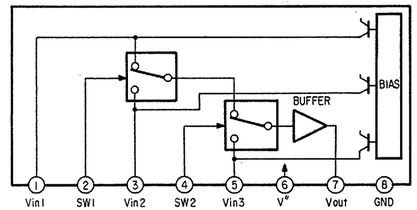
— V Board —



— V Board —

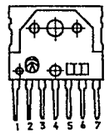
① 2.1 Vp-p (H)	② 2.1 Vp-p (H)	③ 2 Vp-p (H)
④ 1 Vp-p (H)	⑤ 1 Vp-p (H)	⑥ 1Vp-p (H)
⑦ 1 Vp-p (H)	⑧ Vp-p ( )	⑨ Vp-p ( )
⑩ Vp-p ( )	⑪ 0.2 Vp-p (0.075MS)	⑫ 0.59Vp-p (0.075MS)

V BOARD IC1205 NJM2234L

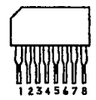


6-4. SEMICONDUCTORS

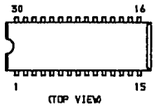
AN5521



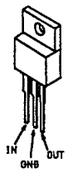
CX20125
NJM2234L



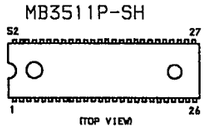
LA7953



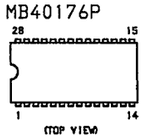
LM7805CT
LM7812CT
RC78M09FA



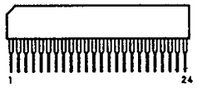
MB3511P-SH



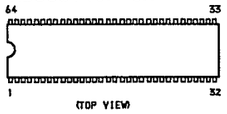
MB40176P



MB81461-12-PSZ-G-BF2

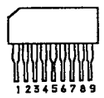


MB886140P-SH

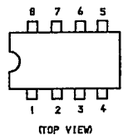


MC68HC05T7-LSC89919B

NJM2245S

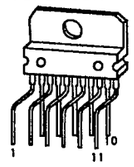


RC4558P
X24C01P

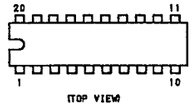


RC78L09A

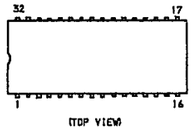
TĐA2009A



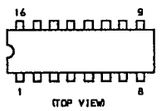
TĐA3569B



TĐA8302



TĐA8444



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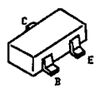
2SC4115SQR

2SA1091-0

2SA1162-G
2SB709A-R
2SC2412K-QR
2SĐ601A-Q



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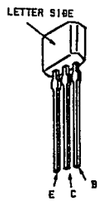
2SC2785-HFE
2SC3311A-QRS



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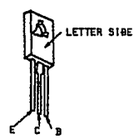
2SC2688-LK



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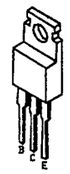

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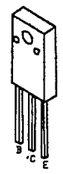
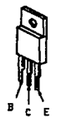
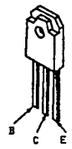


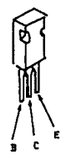
2SĐ1585-K



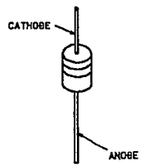
2SĐ1941-07



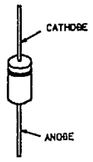
2SĐ2096EF



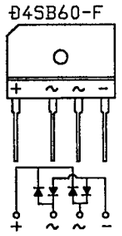
ĐĐ1NS4
RĐ10SB
RĐ30ESB2
RĐ33ESB2
RĐ4.3ESB1
RĐ4.7ESB2
RĐ5.1ESB1
RĐ5.6ESB1
RĐ6.2ESB1
1SS119



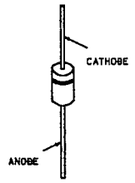
EGP20G
EL1Z
RGP02-17
10E-2



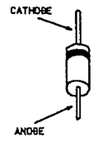
Đ4SB60-F



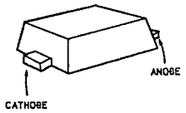
ERC38-06
ERC06-15S
RU-3AM
S2LA20F
EGP30GL-6072



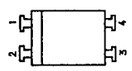
ERĐ29-08J



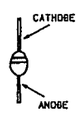
MA110



PC817-C
PS2501-1LB



U05G



SECTION 7
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

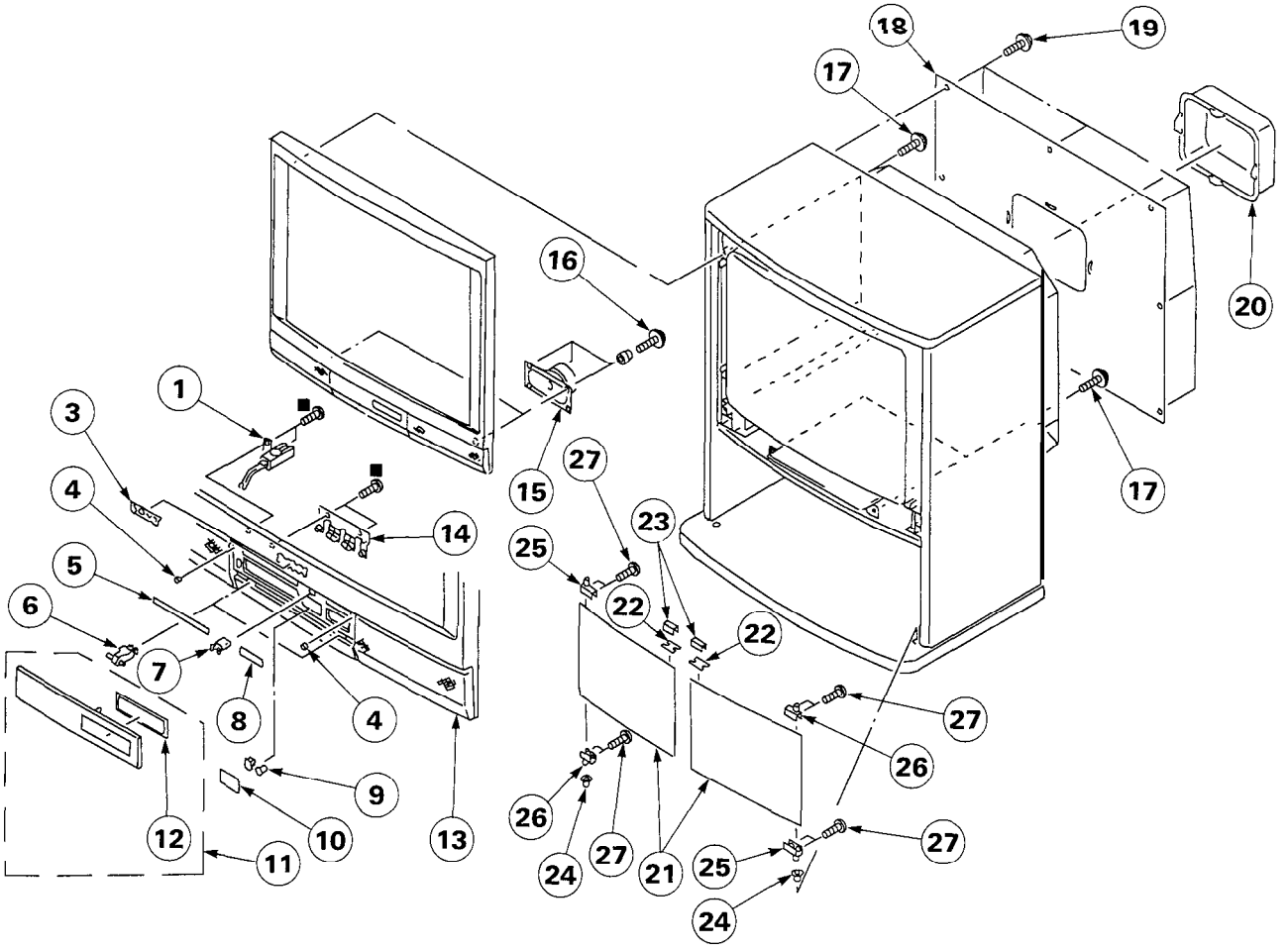
ii

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

7-1. COVER

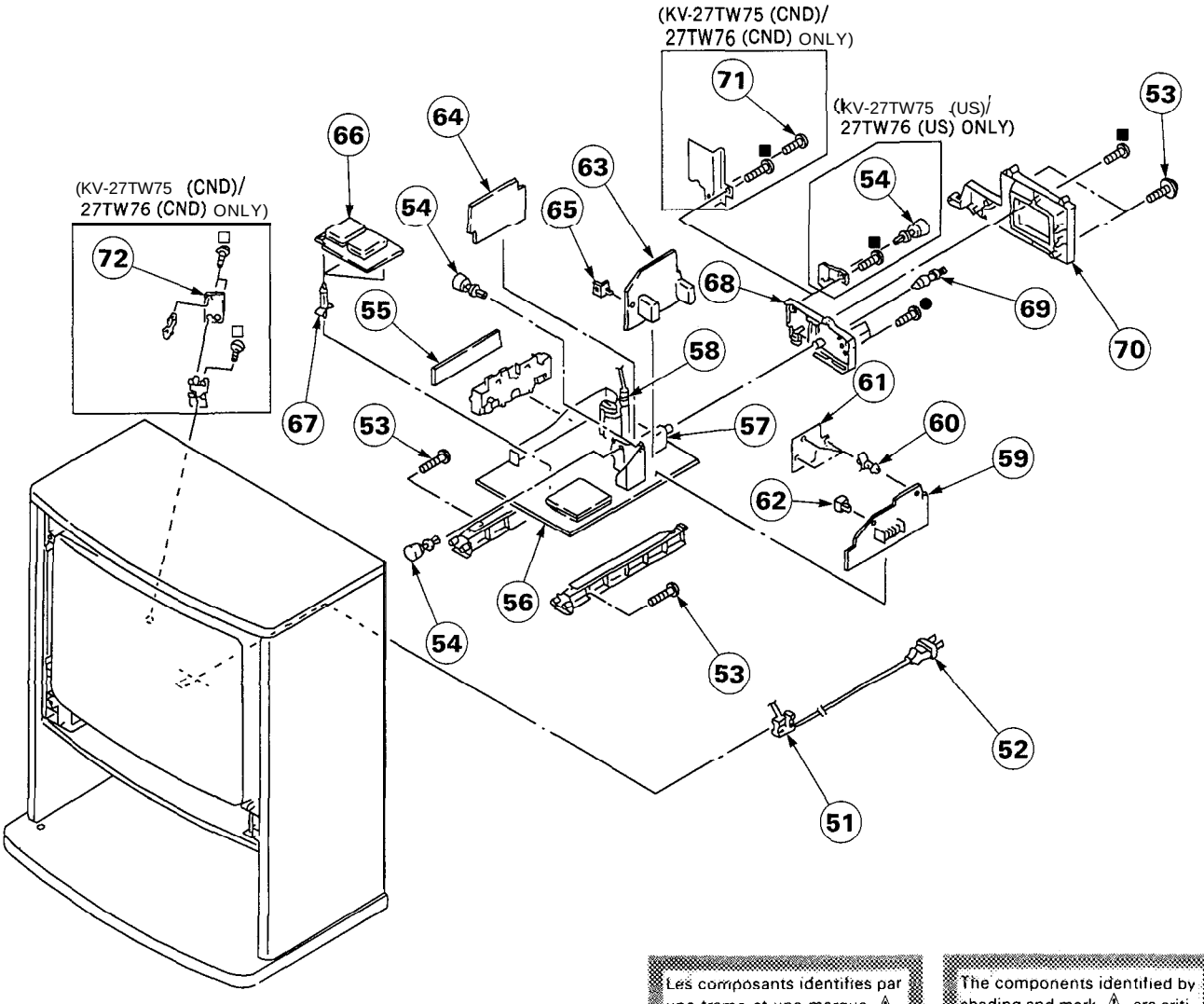
■ : BVTP4X 16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
	*4-032-393-01	DAHPER	
	3-704-179-12	EMBLEM (NO.9), SONY	
	i-314-871-00	CUSHION	
	4-032-392-11	LABEL (CONTROL) (BUTTON)	
	3-703-035-11	SHAFT, LID	
	4-392-036-01	CATCHER, PUSH	
	4-032-390-11	LABEL (CONTROL) (A/V)	
	*4-389-517-01	GUIDE (R), LIGHT	
	4-032-391-11	PLATE, INDICATION	
	X-4030-180-1	DOOR ASSY, CONTROL	
	4-034-973-01	WINDOW, ORNAMENTAL	
	X-4030-181-1	BEZEL SUB ASSY	
	X-4029-805-1	BUTTON ASSY, MULTI	
15	l-544-549711	SPEAKER	
16	4-388-477-01	SCREW(3X16),TAPPING,+BV WASHER	
17	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
18	4-034-972-01	PLATE, REAR	
19	4-378-522-01	SCREW, TAPPING, HEXAGON HEAD	
20	*4-032-338-01	COVER, NECK	
21	4-034-971-01	DOOR, GLASS	
22	2-352-981-01	SPACER	
23	2-359-505-01	RETAINER. MAGNET	
24	2-112-350-01	BEARING	12
25	4-394-243-01	HINGE (B)	
26	4-394-244-01	HINGE (A)	
27	2-112-355-01	SCREW	

7-2. CHASSIS

● : BVTP3× 12 7-685-648-79
■ : BVTP4× 16 7-685-663-79
CI: BVTP4×12 7-685-661-14



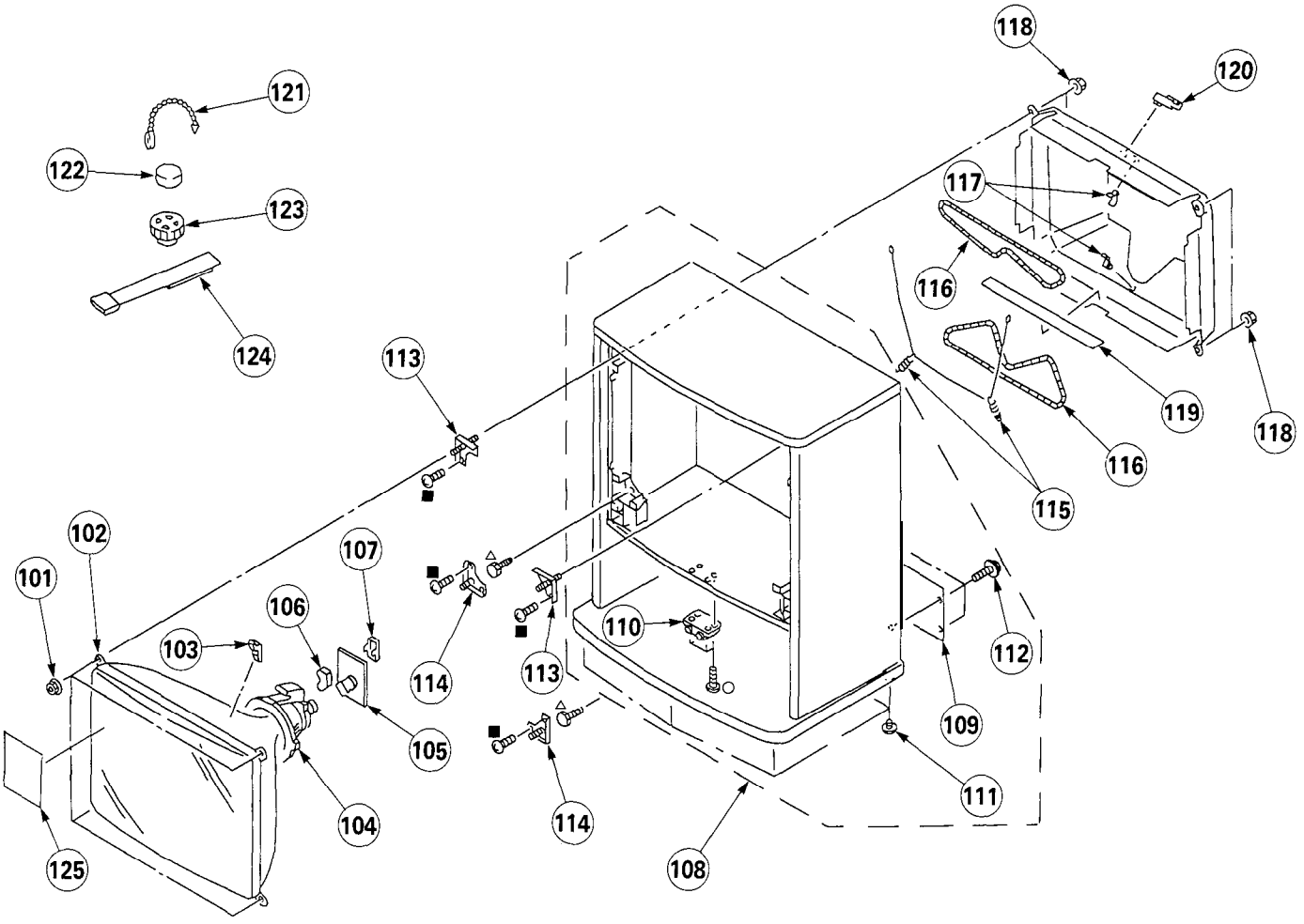
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
51	⚠4-357-726-02	HOLDER, AC CORD	
52	⚠1-590-492-21	CORD, POWER (WITH CONNECTOR)	
53	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
54	*4-397-418-01	RIVET, T TYPE	
55	*1-638-095-23	F BOARD	
56	*A-1346-039-A	D BOARD, COMPLETE (KV-27TW75(U),KV-27TW76(U) ONLY)	
	*A-1346-038-A	D BOARD, COMPLETE (KV-27TW75(C),KV-27TW76(C) ONLY)	
57	⚠1-465-371-11	TUNER, BT (BTP-BA401) (KV-27TW75(U),KV-27TW76(U) ONLY)	
	⚠1-465-371-21	TUNER, BT (BTP-BA401) (KV-27TW75(C),KV-27TW76(C) ONLY)	
58	⚠1-439-502-11	TRANSFORMER ASSY, FLYBACK (NX-2600A3)	
59	A-1135-670-A	B BOARD, COMPLETE	
60	*3-703'353-03	SUPPORT, PC BOARD	
61	4-033-125-01	PLATE, SHIELD	
62	*4-032-236-01	HOLDER (B), PC BOARD	
63	A-1296-931-A	A BOARD, COMPLETE	
64	A-1345-953-A	E BOARD, COMPLETE	
65	*4-397-417-01	HOLDER, PC BOARD	
66	A-1347-053-A	V BOARD, COMPLETE	
67	*3-703-353-10	SUPPORT, PC BOARD	
68	X-4029-754-1	TERMINAL BOARD ASSY, ANTENNA	
69	1-573-657-11	PLUG, F-PIN	
70	4-034-968-01	COVER, ANTENNA TERMINAL	
71	4-382-854-11	SCREW (M3X10), P, SW (+) (KV-27TW75(C),KV-27TW76(C) ONLY)	
72	*1-642-138-11	FA BOARD(KV-27TW75(C),KV-27TW76(C) ONLY)	

7-3. PICTURE TUBE

■ : BVTP4 X 16 7-685-663-79
○ : BVTP3 X 16 7-685-650-79
A : BOLT, HEXAGON5×20 7-683-340-07



Les composants identifiés par une trame et une marque ⚠ sont critiques pour la securite Ne les remplacer que par une piece portant le numero specifie

The components identified by shading and mark ⚠ are critical for safety Replace only with part number specified

REF.NO.	PART NO.	DESCRIPTION	REMARK
101	4-387-204-01	NUT, SPECIAL, PICTURE TUBE	
102	⚠ 8-737-753-09	PICTURE TUBE (A68JMT50X)	
103	3 704 495 01	SPACER, DY	
104	⚠ 1-451-275-31	DEFLECTION YOKE (Y28PFA)	
105	*A 1331 128 A	C BOARD, COMPLETE (KV-27TW75(U),KV-27TW76(U) ONLY)	
	*A-1331-189-A	C BOARD, COMPLETE (KV-27TW75(C),KV-27TW76(C) ONLY)	
106	*4-379-167-01	COVER (MAIN), CV	
107	*4-379-160-01	COVER (REAR LID), CV	
108	X-4030-293-1	CABINET ASSY 109~112 (KV-27TW75(U/C) ONLY)	
	X-4030-293-2	CABINET ASSY 109~112 (KV-27TW76(U/C) ONLY)	
109		BOTTOM. REAR BOARD	
110	4-034-970-01	MAGNET; PUSH	
111	2-383-604-01	FOOT	
112	4-378-522-01	SCREW, TAPPING, HEXAGON HEAD	
113	*4-379-197-01	BRACKET (H), PICTURE TUBE	
114	*4-376-989-01	BRACKET (E), PICTURE TUBE	
115	4-369-318-00	SPRING, TENSION	
116	⚠ 1-426-350-11	COIL, DEMAGNETIZATION	
117	*4 371 629 01	STOPPER, WIRE	
118	4-306-034-00	FLANGE NUT.,(B) 5MM	
119	4-385-725-01	SHEET, BLOTTING	
120	*4-387-284-01	HOLDER, LEAD	
121	4-308-870-00	CLIP, LEAD WIRE	
122	1-452-032-00	MAGNET, DISK; 10MM ϕ	
123	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
124	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
125	*3-703-703-01	STICKER, SONY SYMBOL (50)	

B

SECTION 8
ELECTRICAL PARTS LIST

NOTE :

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name. 1

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : mH, UH : μH

- The components identified by ❑ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation Should replacement be required, replace only with the value originally used
- There are some cases the reference number on one board overlaps on the other board Therefore, when ordering parts by the reference number, please include the board name

REF.NO.	PART NO.	DESCRIPTION				REMARK
	A-1135-670-A	B BOARD, COMPLETE				
		**********				
	*4-341-752-01	EYELET (EY18~EY20)				
	4-382-854-11	SCREW (M3X10), P, SW (+)				
		<CONNECTOR>				
B1	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P				
B2	*1-564-506-11	PLUG, CONNECTOR 3P				
B3	*1-564-509-11	PLUG, CONNECTOR 6P				
B4	*1-564-506-11	PLUG, CONNECTOR 3P				
B7	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P				
B10	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P				
		<CAPACITOR>				
C301	1-124-282-00	ELECT	22MF	20%	16V	
C302	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50v	
C303	1-126-233-11	ELECT	22MF	20%	25V	
C306	1-163-105-00	CERAMIC CHIP	33PF	5%	50v	
C307	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C308	I-124-903-11	ELECT	1MF	20%	50v	
C310	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C312	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C313	1-124-925-11	ELECT	2.2MF	20%	50V	
C314	1-126-233-11	ELECT	22MF	20%	25V	
C315	1-124-907-11	ELECT	10MF	20%	50V	
C316	I-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C317	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	
C318	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
c319	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V	
C320	1-126-101-11	ELECT	100MF	20%	16V	
C321	I-124-907-11	ELECT	10MF	20%	50v	
C322	1-124-903-11	ELECT	1MF	20%	50V	
C323	1-124-477-11	ELECT	47MF	20%	16V	
C324	I-124-907-11	ELECT	10MF	20%	50v	
C325	1-124-907-11	ELECT	10MF	20%	50V	
C326	I-124-927-11	ELECT	4.7MF	20%	50V	
C329	1-124-927-11	ELECT	4.7MF	20%	50v	
C330	1-126-233-11	ELECT	22MF	20%	25V	
c331	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C332	1-163-035-00	CERAMIC CHIP	0.047MF		50v	
C333	1-126-233-11	ELECT	22MF	20%	25V	
Cl402	1-124-903-11	ELECT	1MF	20%	50v	
Cl403	1-124-907-11	ELECT	10MF	20%	50V	
Cl404	1-124-903-11	ELECT	1MF	20%	50V	
Cl405	1-124-925-11	ELECT	2.2MF	20%	50V	
Cl406	1-136-153-00	FILM	0.01MF	5%	50V	
Cl407	I-136-153-00	FILM	0.01MF	5%	50V	
Cl408	1-124-925-11	ELECT	2.2MF	20%	50V	
Cl409	1-124-925-11	ELECT	2.2MF	20%	50V	
Cl410	1-124-120-11	ELECT	220MF	20%	25V	
Cl411	1-126-233-11	ELECT	22MF	20%	25V	
Cl412	1-124-120-11	ELECT	220MF	20%	25V	
Cl413	1-136-173-00	FILM	0.47MF	5%	50V	
Cl414	1-124-907-11	ELECT	10MF	20%	50V	
Cl415	1-136-169-00	FILM	0.22MF	5%	50V	
Cl416	1-124-563-11	ELECT	2200MF	20%	25V	
Cl417	1-136-169-00	FILM	0.22MF	5%	50V	
Cl418	1-124-563-11	ELECT	2200MF	20%	25V	
Cl419	1-124-563-11	ELECT	2200MF	20%	25V	
Cl422	1-163-025-11	CERAMIC CHIP	0.00lMF		5ov	
		<DIODE>				
D301	8-719-158-39	DIODE	RD10S-B			
D302	8-719-158-39	DIODE	RD10S-B			
D303	8-719-158-39	DIODE	RD10S-B			
D304	s-719-404-46	DIODE	MA110			
D305	8-719-404-46	DIODE	MA110			
D306	8-719-109-81	DIODE	RD4.7ES-B2			
D307	8-719-158-39	DIODE	RD10S-B			
D308	8-719-158-39	DIODE	RD10S-B			
D309	8-719-158-39	DIODE	RD10S-B			
D310	s-719-158-39	DIODE	RD10S-B			
		<DELAY LINE>				
DL301	I-415-851-11	DELAY LINE				
		<FILTER>				
FL301	1-239-151-11	FILTER, HIGH PASS				
		<IC>				
IC301	8-759-518-39	IC	TDA3569B/N2			
IC302	8-752-012-52	IC	CX20125			
IC1400	8-759-980-43	IC	TDA2009A			
		<COIL>				
L304	i-408-405-00	INDUCTOR.	4.7UH			
		<TRANSISTOR>				
Q301	8-729-920-74	TRANSISTOR	2SC2412K-QR			
Q302	8-729-216-22	TRANSISTOR	2SA1162-G			
Q303	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q304	8-729-920-74	TRANSISTOR	2SC2412K-QR			
Q305	8-729-920-74	TRANSISTOR	2SC2412K-QR			

REF.NO.	PART NO	DESCRIPTION	REMARK
Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
8307	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q308	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q309	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q310	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q311	a-729-920-74	TRANSISTOR 2SC2412K-QR	
Q312	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q313	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q314	8-729-216-22	TRANSISTOR 2SA1162-G	
Q330	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1400	B-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1401	8-729-920-74	TRANSISTOR 2SC2412K-QR	
81402	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1403	8-729-216-22	TRANSISTOR 2SA1162-G	

<RESISTOR>

R301	I-216-091-00	METAL GLAZE	56K	5%	1/10W
R302	l-216-075-00	METAL GLAZE	12K	5%	1/10W
R303	I-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R304	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R305	l-216-041-00	METAL GLAZE	470	5%	1/10W
R306	I-216-107-00	METAL GLAZE	270K	5%	1/10W
R307	l-216-121-00	METAL GLAZE	1M	5%	1/10W
R308	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R309	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R310	I-216-095-00	METAL GLAZE	82K	5%	1/10W
R311	l-216-097-00	METAL GLAZE	100K	5%	1/10W
R312	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R313	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R314	l-216-295-00	METAL GLAZE	0	5%	1/10W
R315	l-216-295-00	METAL GLAZE	0	5%	1/10W
R316	l-216-033-00	METAL GLAZE	220	5%	1/10W
R318	I-216-089-00	METAL GLAZE	47K	5%	1/10W
R319	I-216-081-00	METAL GLAZE	22K	5%	1/10W
R320	l-216-033-00	METAL GLAZE	220	5%	1/10W
R321	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R322	l-216-033-00	METAL GLAZE	220	5%	1/10W
R323	I-216-033-00	METAL GLAZE	220	5%	1/10W
R324	l-216-033-00	METAL GLAZE	220	5%	1/10W
R325	l-216-033-00	METAL GLAZE	220	5%	1/10W
R326	I-216-033-00	METAL GLAZE	220	5%	1/10W
R327	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R329	l-216-295-00	METAL GLAZE	0	5%	1/10W
R330	I-216-037-00	METAL GLAZE	330	5%	1/10W
R331	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R332	l-216-089-00	METAL GLAZE	47K	5%	1/10W
R333	l-216-089-00	METAL GLAZE	47K	5%	1/10W
R334	I-216-033-00	METAL GLAZE	220	5%	1/10W
R335	l-216-045-00	METAL GLAZE	680	5%	1/10W
R336	I-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R337	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R338	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R339	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R340	I-216-097-00	METAL GLAZE	100K	5%	1/10W
R342	l-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R343	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R344	l-216-025-00	METAL GLAZE	100	5%	1/10W
R345	l-216-075-00	METAL GLAZE	12K	5%	1/10W
R346	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R347	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R348	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R349	I-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R350	l-216-075-00	METAL GLAZE	12K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R351	I-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R352	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R353	l-216-037-00	METAL GLAZE	330	5%	1/10W
R354	I-216-075-00	METAL GLAZE	12K	5%	1/10W
R355	l-216-075-00	METAL GLAZE	12K	5%	1/10W
R356	l-216-025-00	METAL GLAZE	100	5%	1/10W
R357	l-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R358	l-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R359	l-216-109-00	METAL GLAZE	330K	5%	1/10W
R360	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R361	I-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R362	l-216-083-00	METAL GLAZE	27K	5%	1/10W
R363	l-216-117-00	METAL GLAZE	680K	5%	1/10W
R364	I-216-025-00	METAL GLAZE	100	5%	1/10W
R377	1-247-688-11	CARBON	10	5%	1/4W F
R380	l-216-041-00	METAL GLAZE	470	5%	1/10W
R381	l-216-033-00	METAL GLAZE	220	5%	1/10W
R382	l-216-033-00	METAL GLAZE	220	5%	1/10W
R383	I-216-033-00	METAL GLAZE	220	5%	1/10W
R384	l-216-033-00	METAL GLAZE	220	5%	1/10W
R385	l-216-033-00	METAL GLAZE	220	5%	1/10W
R386	l-216-121-00	METAL GLAZE	1M	5%	1/10W
R387	l-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R388	I-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R1401	I-216-025-00	METAL GLAZE	100	5%	1/10W
R1403	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1405	I-216-057-00	METAL GLAZE	2.2K	5%	1/10W
RI406	I-216-025-00	METAL GLAZE	100	5%	1/10W
R1409	l-216-077-00	METAL GLAZE	15K	5%	1/10W
R1410	l-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R1411	l-216-077-00	METAL GLAZE	15K	5%	1/10W
R1412	l-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R1413	l-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R1414	I-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R1415	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1416	I-216-089-00	METAL GLAZE	47K	5%	1/10W
R1417	l-216-085-00	METAL GLAZE	33K	5%	1/10W
R1418	I-216-097-00	METAL GLAZE	100K	5%	1/10W
R1419	l-216-041-00	METAL GLAZE	470	5%	1/10W
R1420	l-216-075-00	METAL GLAZE	12K	5%	1/10W
R1421	l-216-075-00	METAL GLAZE	12K	5%	1/10W
R1422	I-216-011-00	METAL GLAZE	27	5%	1/10W
R1423	l-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R1424	l-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R1425	l-216-011-00	METAL GLAZE	27	5%	1/10W
R1426	l-216-298-00	METAL GLAZE	2.2	5%	1/10W
RI427	l-216-298-00	METAL GLAZE	2.2	5%	1/10W
R1428	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1429	I-216-057-00	METAL GLAZE	2.2K	5%	1/10W

<VARIABLE RESISTOR>

RV301	l-238-011-11	RES, ADJ, CARBON	470
RV302	l-238-017-11	RES, ADJ, CARBON	22K
RV303	l-238-014-11	RES, ADJ, CARBON	3.3K
RV1400	l-238-016-11	RES, ADJ, CARBON	10K

<SWITCH>

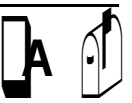
S751	l-554-186-00	SWITCH, LEVER

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<CRYSTAL>	
X301	l-567-505-11	OSCILLATOR, CRYSTAL	
**********			
	*l-642-138-11	FA BOARD ********	(KV-27TW75(C),KV-27TW76(C) ONLY)
	1-533-223-11	CLIP, FUSE	
	*4-341-751-01	EYELET (EY5,EY6)	
	*4-341-752-01	EYELET (EY1~EY4)	
		<CAPACITOR>	
C600	⚠1-136-311-51	FILM 0.47MF 20% 125V	
		<FUSE>	
F600	⚠1-532-748-11	FUSE, GLASS'TUBE 6.3A/125V	
		<CONNECTOR>	
FAI	*l-580-844-11	PIN, CONNECTOR (POWER)	
FA2	*1-580-844-11	PIN, CONNECTOR POWER)	
		<RESISTOR>	
R600	⚠1-202-723-91	SOLID 2.2M 10% 1/2W	
**********			
	*1-638-095-23	F BOARD *******	
	l-533-223-11	CLIP, FUSE	(KV-27TW75(U),KV-27TW76(U) ONLY:)
	*4-341-751-01	EYELET (EY3~EY10,EY11(KV-27TW75(U),KV-27TW76(U) ONLY),EY12(KV-27TW75(U),KV-27TW76(U) ONLY),EY14,EY15,EY22~EY24)	
	*4-341-752-01	EYELET (EY1,EY2,EY13)	
		<CAPACITOR>	
C680	⚠1-136-311-51	FILM 0.47MF 20% 125V	(KV-27TW75(U),KV-27TW76(U) ONLY)
C681	⚠1-161-741-51	CERAMIC 0.001MF 10% 400V	
C682	⚠1-136-311-51	FILM 0.47MF 20% 125V	
C685	l-161-754-00	CERAMIC 0.001MF 10% 3KV	
		<DIODE>	
D680	8-719-911-55	DIODE U05G	
D1580	8-719-911-55	DIODE U05G	
D1581	8-719-911-55	DIODE U05G	
		<CONNECTOR>	
F1	*1-580-843-11	PIN, CONNECTOR (POWER)	
F3	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
F4	*l-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
F5	*l-559-991-21	CONNECTOR ASSY 1P	
F7	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P	
F8	*1-564-506-11	PLUG, CONNECTOR 3P	
F9	*l-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
F18	*1-564-507-11	PLUG, CONNECTOR 4P	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<FUSE>	
F601	⚠1-532-748-11	FUSE, GLASS TUBE 6.3A/125V	(KV-27TW75(U),KV-27TW76(U) ONLY)
		<RESISTOR>	
R680	⚠1-202-723-91	SOLID 2.2M 10% 1/2W	(KV-27TW75(U),KV-27TW76(U) ONLY)
R681	&l-202-723-91	SOLID 2.2M 10% 1/2W	
R683	l-202-525-00	SOLID 10 10% 1/2W	
RI580	1-215-884-11	METAL OXIDE 47 5% 2W F	
Rl581	i-215-884-11	METAL OXIDE 47 5% 2W F	
R1584	l-215-880-00	METAL OXIDE 10 5% 2W F	
		<RELAY>	
RY680	⚠1-515-684-22	R E L A Y	
		<TRANSFORMER>	
T680	⚠1-424-220-21	TRANSFORMER, LINE FILTER	
T681	⚠1-424-546-11	TRANSFORMER, LINE FILTER	
		<THERMISTOR>	
THP601	⚠1-808-081-14	THERMISTOR, POSITIVE	
**********			
	A-1296-931-A	A BOARD, COMPLETE **********	
		<CONNECTOR>	
A1	*1-564-508-11	PLUG, CONNECTOR 5P	
A3	I-573-301-11	CONNECTOR, BOARD TO BOARD 20P	
A4	l-573-301-11	CONNECTOR, BOARD TO BOARD 20P	
A11	*1-564-514-11	PLUG, CONNECTOR 11P	
Al2	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
		<CAPACITOR>	
C202	1-130-471-00	MYLAR 0.001MF 5% 50V	
C203	1-126-233-11	ELECT 22MF 20% 50V	
C204	l-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C207	l-136-163-00	FILM 0.068MF 5% 50V	
C209	l-136-165-00	FILM 0.1MF 5% 50V	
C210	l-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C211	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C213	l-136-161-00	FILM 0.047MF 5% 50V	
C215	l-163-121-00	CERAMIC CHIP 150PF 5% 50V	
C216	1-126-233-11	ELECT 22MF 20% 25V	
C217	1-126-233-11	ELECT 22MF 20% 25V	
C218	l-124-903-11	ELECT 1MF 20% 50V	
C219	l-163-007-11	CERAMIC CHIP 680PF 10% 50V	
C220	l-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C222	I-126-233-11	ELECT 22MF 20% 25V	
C224	l-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C225	l-124-903-11	ELECT 1MF 20% 50V	
C226	1-126-101-11	ELECT 100MF 20% 16V	
C233	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C234	1-124-477-11	ELECT 47MF 20% 16V	
C235	l-130-729-00	FILM 0.0027MF 5% 50V	
C237	l-124-907-11	ELECT 10MF 20% 50V	



REF.NO.	PART NO.	DESCRIPTION			REMARK
C241	l-136-153-00	FILM	0.01MF	5%	50V
C242	i-136-153-00	FILK	0.01MF	5%	50V
C251	I-136-169-00	FILM	0.22MF	5%	50V
C254	1-124-907-11	ELECT	10MF	20%	50V
C274	I-124-477-11	ELECT	47MF	20%	25V
C275	l-164-005-11	CERAMIC CHIP	0.47MF		25V
C278	1-101-006-00	CERAMIC	0.047MF		50V
C287	1-101-006-00	CERAMIC	0.047MF		50v
C401	I-126-233-11	ELECT	22MF	20%	25V
C402	l-124-903-11	ELECT	1MF	20%	50V
C403	l-124-903-11	ELECT	1MF	20%	50V
C404	l-124-903-11	ELECT	1MF	20%	50V
C405	l-124-903-11	ELECT	1MF	20%	50v
C406	l-126-233-11	ELECT	22MF	20%	25V
C407	l-126-233-11	ELECT	22MF	20%	25V
C410	1-126-233-11	ELECT	22MF	20%	25V
C412	l-164-232-11	CERAMIC CHIP	0.01MF	10%	50v
C413	I-164-232-11	CERAMIC CHIP	0.01MF	10%	50v

<DIODE>

D401	g-719-158-39	DIODE	RDIOS-B
D402	g-719-158-39	DIODE	RDIOS-B
D403	g-719-158-39	DIODE	RD1OS-B
D404	8-719-158-39	DIODE	RD1OS-B
D405	g-719-158-39	DIODE	RD1OS-B
D406	8-719-158-39	DIODE	RD1OS-B
D407	8-719-158-39	DIODE	RDIOS-B
D408	g-719-158-39	DIODE	RDIOS-B
D409	8-719-158-39	DIODE	RD1OS-B

<IC>

IC201	g-759-510-90	IC TDA8302
IC202	8-759-982-25	IC RC78L09A
IC203	8-759-982-37	IC RC78M93FD
MM201	g-741-637-11	IC SBX1637-11

<IF BLOCK>

IF201	l-464-756-21	IF BLOCK (IFF-450A)

<JACK>

J401	l-566-846-11	CONNECTOR, (S) TERMINAL 4P
J402	l-573-658-11	JACK BLOCK, PIN 7P

<COIL>

L201	I-410-792-31	INDUCTOR	0.82UH

<TRANSISTOR>

Q201	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q203	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q209	8-729-216-22	TRANSISTOR	2SA1162-G
Q401	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q406	g-729-920-74	TRANSISTOR	2SC2412K-QR

<RESISTOR>

JR201	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR202	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR207	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR215	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR216	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR217	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR220	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR221	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR222	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR223	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR224	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR230	I-216-295-00	METAL GLAZE	0	5%	1/10W
R200	l-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R201	l-216-085-00	METAL GLAZE	33K	5%	1/10W
R202	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R204	l-216-105-00	METAL GLAZE	220K	5%	1/10W
R206	l-216-091-00	METAL GLAZE	56K	5%	1/10W
R207	I-216-099-00	METAL GLAZE	120K	5%	1/10W
R208	l-216-091-00	METAL GLAZE	56K	5%	1/10W
R209	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R210	I-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R211	l-216-089-00	METAL GLAZE	47K	5%	1/10W
R212	l-216-085-00	METAL GLAZE	33K	5%	1/10W
R213	l-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R214	I-216-095-00	METAL GLAZE	82K	5%	1/10W
R219	I-216-073-00	METAL GLAZE	10K	5%	1/10W
R220	I-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R226	I-216-037-00	METAL GLAZE	330	5%	1/10W
R227	I-216-089-00	METAL GLAZE	47K	5%	1/10W
R228	I-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R229	I-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R230	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R231	I-216-295-00	METAL GLAZE	0	5%	1/10W
R232	l-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R234	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R237	I-216-033-00	METAL GLAZE	220	5%	1/10W
R238	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R239	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R249	I-216-025-00	METAL GLAZE	100	5%	1/10W
R250	I-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R251	I-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R252	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R253	I-216-025-00	METAL GLAZE	100	5%	1/10W
R255	l-216-295-00	METAL GLAZE	0	5%	1/10W
R256	I-216-083-00	METAL GLAZE	27K	5%	1/10W
R257	I-216-099-00	METAL GLAZE	120K	5%	1/10W
R258	I-216-025-00	METAL GLAZE	100	5%	1/10W
R260	l-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R261	I-216-073-00	METAL GLAZE	10K	5%	1/10W
R265	I-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R266	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R267	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R270	I-216-295-00	METAL GLAZE	0	5%	1/10W
R271	l-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R272	I-216-295-00	METAL GLAZE	0	5%	1/10W
8273	l-249-482-11	CARBON	4.7	5%	1/2W F
R290	l-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R291	I-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R292	l-216-129-00	METAL GLAZE	2.2M	5%	1/10W
R293	I-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R294	I-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R295	l-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R296	I-216-295-00	METAL GLAZE	0	5%	1/10W
R401	I-216-023-00	METAL GLAZE	82	5%	1/10W
R402	I-216-079-00	METAL GLAZE	18K	5%	1/10W
R403	I-216-103-00	METAL GLAZE	180K	5%	1/10W
R404	l-216-079-00	METAL GLAZE	18K	5%	1/10W

A C

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R405	l-216-103-00	METAL GLAZE	180K	5%	1/10W	
R406	I-216-079-00	METAL GLAZE	18K	5%	1/10W	
R407	l-216-103-00	METAL GLAZE	180K	5%	1/10W	
R408	I-216-079-00	METAL GLAZE	18K	5%	1/10W	
R409	l-216-103-00	METAL GLAZE	180K	5%	1/10W	
R410	l-216-023-00	METAL GLAZE	82	5%	1/10W	
R411	l-216-023-00	METAL GLAZE	82	5%	1/10W	
R412	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R413	l-216-097-00	METAL GLAZE	100K	5%	1/10W	
R414	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R415	l-216-097-00	METAL GLAZE	100K	5%	1/10W	
R416	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R417	I-216-073-00	METAL GLAZE	10K	5%	1/10W	
R418	l-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R419	I-216-295-00	METAL GLAZE	0	5%	1/10W	
R420	l-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R421	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R422	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R431	I-216-025-00	METAL GLAZE	100	5%	1/10W	
R432	I-216-073-00	METAL GLAZE	10K	5%	1/10W	
R433	I-216-073-00	METAL GLAZE	10K	5%	1/10W	
R434	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W	

<VARIABLE RESISTOR>

RV205	I-238-015-11	RES, ADJ, CARBON	4.7K
RV250	I-226-703-11	RES, ADJ. METAL GLAZE	10K

****

	*A-1331-128-A	C BOARD, COMPLETE
		********** (KV-27TW75(U),KV-27TW76(U) ONLY)
	*A-1331-189-A	C BOARD, COMPLETE
		********** (KV-27TW75(C),KV-27TW76(C) ONLY)
	*4-379-160-01	COVER (REAR LID), CV
	*4-379-167-01	COVER (MAIN), CV

<CONNECTOR>

C1	*l-506-371-00	PIN, CONNECTOR 2P
C2	*l-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P
c3	*1-564-509-11	PLUG, CONNECTOR 6P

<CAPACITOR>

C702	l-162-116-00	CERAMIC	680PF	10%	2KV
C704	l-124-915-11	ELECT	10MF	20%	63V
C705	l-164-083-11	CERAMIC	68dPF	10%	5ov
C706	I-164-083-11	CERAMIC	680PF	10%	5ov
C707	I-164-083-11	CERAMIC	680PF	10%	5ov
C708	l-164-081-11	CERAMIC	470PF	10%	5ov
C709	l-164-081-11	CERAMIC	470PF	10%	50V
C710	l-164-081-11	CERAMIC	470PF	10%	50V
C712	l-124-477-11	ELECT	47MF	20%	16V
C721	I-161-731-81	CERAMIC	0.001MF	10%	2KV
C722	l-162-622-11	CERAMIC	330PF	10%	6.3KV

<DIODE>

D701	8-719-911-19	DIODE 1SS119
D702	a-719-911-19	DIODE 1SS119
D703	8-719-911-19	DIODE 1SS119

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<JACK>	
J701	⚠1-540-071-13	SOCKET, PICTURE TUBE	
		<COIL>	
L701	1-408-417-00	INDUCTOR 47UH	
		<NEON LAMP>	
NL701	1-519-108-99	LAMP,NEON ASSY	
		<TRANSISTOR>	
Q701	g-729-119-78	TRANSISTOR 2SC2785-HFE	
8702	s-729-326-11	TRANSISTOR 2SC2611	
Q703	g-729-119-78	TRANSISTOR 2SC2785-HFE	
8704	s-729-326-11	TRANSISTOR 2SC2611	
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q706	8-729-326-11	TRANSISTOR 2SC2611	
		<RESISTOR>	
R701	l-202-838-00	SOLID 100K 10% 1/2W	
R702	l-216-391-00	METAL OXIDE 1.5 5% 3W	F (KV-27TW75(U),KV-27TW76(U) ONLY)
	I-216-394-00	METAL OXIDE 2.7 5% 3W	F (KV-27TW75(C),KV-27TW76(C) ONLY)
R703	l-202-842-11	SOLID 220K 10% 1/2W	
R704	I-202-846-00	SOLID 470K 10% 1/2W	
R705	I-202-837-00	SOLID 82K 10% 1/2W	
R706	I-202-549-00	SOLID 100 10% 1/2W	
R707	l-202-842-11	SOLID 220K 10% 1/2W	
R708	I-202-824-00	SOLID 3.3K 10% 1/2W	
R709	I-202-824-00	SOLID 3.3K 10% 1/2W	
R710	I-202-553-00	SOLID 150 10% 1/2W	
R711	I-249-411-11	CARBON 330 5% 1/4W	
R712	I-249-411-11	CARBON 330 5% 1/4W	
R713	I-202-824-00	SOLID 3.3K 10% 1/2W	
R714	l-249-405-11	CARBON 100 5% 1/4W	
R715	l-249-422-11	CARBON 2.7K 5% 1/4W	
R716	I-249-416-11	CARBON 820 5% 1/4W	
R718	I-249-393-11	CARBON 10 5% 1/4W	
R719	I-249-417-11	CARBON 1K 5% 1/4W	
R720	l-249-413-11	CARBON 470 5% 1/4W	
R722	l-215-923-00	METAL OXIDE 10K 5% 3W	F
R723	I-249-416-11	CARBON 820 5% 1/4W	
R725	l-249-422-11	CARBON 2.7K 5% 1/4W	
R726	l-249-393-11	CARBON 10 5% 1/4W	
R727	I-249-417-11	CARBON 1K 5% 1/4W	
R728	I-249-413-11	CARBON 470 5% 1/4W	
R729	I-249-411-11	CARBON 330 5% 1/4W	
R730	l-215-923-00	METAL OXIDE 10K 5% 3W	F
R732	I-249-412-11	CARBON 390 5% 1/4W	
R733	I-249-422-11	CARBON 2.7K 5% 1/4W	
R734	I-249-420-11	CARBON 1.8K 5% 1/4W	
R735	I-249-393-11	CARBON 10 5% 1/4W	
R737	l-215-923-00	METAL OXIDE 10K 5% 3W	F
R738	l-202-719-00	SOLID 1M 10% 1/2W	
R739	I-202-842-11	SOLID 220K 10% 1/2W	
R740	l-202-642-11	SOLID 220K 10% 1/2W	

C E

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The components identified by shading and mark ⚠ are critical for safety
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REF.NO.	PART NO.	DESCRIPTION	REMARK

<VARIABLE RESISTOR>

RV701	1-230-619-11	RES, ADJ, METAL GLAZE 110M	
RV702	1-238-599-11	RES. ADJ, CARBON 4.7K	
RV703	1-238-598-11	RES, ADJ, CARBON 2.2K	
RV704	1-238-599-11	RES, ADJ, CARBON 4.7K	
RV705	I-238-598-11	RES, ADJ, CARBON 2.2K	
RV706	1-238-599-11	RES, ADJ. CARBON 4.7K	
RV707	l-238-601-11	RES, ADJ, CARBON, 22K	
RV708	I-230-641-11	RES. ADJ, METAL GLAZE 2.2M	

****

A-1345-953-A E BOARD, COMPLETE
****

<CAPACITOR>

C551	1-124-925-11	ELECT	2.2MF	20%	50V
c553	I-124-907-11	ELECT	10MF	20%	50V
c554	1-126-329-11	ELECT	470MF	10%	50V
C556	I-124-925-11	ELECT	2.2MF	20%	50V
C557	1-124-925-11	ELECT	2.2MF	20%	50V
C558	1-124-922-11	ELECT	1000MF	20%	5ov
c575	1-124-478-11	ELECT	100MF	20%	25V
C578	I-124-480-11	ELECT	470MF	20%	25V
Cl520	I-106-351-00	MYLAR	0.0022MF	10%	100V
Cl522	1-124-925-11	ELECT	2.2MF	20%	50V
Cl534	I-106-351-00	MYLAR	0.0022MF	10%	100V
Cl536	l-106-383-00	MYLAR	0.047MF	10%	100V
C1538	l-124-907-11	ELECT	10MF	20%	50V
C1539	1-124-925-11	ELECT	2.2MF	20%	50V
Cl540	l-106-343-00	MYLAR	0.001MF	10%	100V
C1541	1-124-927-11	ELECT	4.7MF	20%	5ov
C1542	l-124-927-11	ELECT	4.7MF	20%	50V
C1543	I-124-925-11	ELECT	2.2MF	20%	50V
C1544	1-124-927-11	ELECT	4.7MF	20%	5ov
C1545	l-124-767-00	ELECT	2.2MF	20%	5ov
C1548	l-124-925-11	ELECT	2.2MF	20%	5ov

<DIODE>

D551	g-719-404-46	DIODE	MA110
D552	8-719-110-72	DIODE	RD30ES-B2
D555	8-719-911-55	DIODE	U05G
D1520	8-719-109-88	DIODE	RD5.6ES-B1
D1521	8-719-404-46	DIODE	MA110
D1522	8-719-404-46	DIODE	MA110
D1523	a-719-404-46	DIODE	MA110
D1524	8-719-404-46	DIODE	MA110

<CONNECTOR>

E5	I-573-301-11	CONNECTOR, BOARD TO BOARD 20P

<IC>

IC551	8-759-945-58	IC RC4558P
IC552	8-759-929-62	IC LM7812CT

<TRANSISTOR>

Q558	8-729-920-74	TRANSISTOR	2SC2412K-QR
41520	8-729-920-74	TRANSISTOR	2SC2412K-QR

<RESISTOR>

R551	l-216-037-00	METAL GLAZE	330	5%	1/10W
R552	I-216-029-00	METAL GLAZE	150	5%	1/10W
R553	l-216-039-00	METAL GLAZE	390	5%	1/10W
R554	l-216-043-00	METAL GLAZE	560	5%	1/10W
R555	I-216-675-11	METAL CHIP	10K	0.50%	1/10W
R556	l-216-073-00	METAL GLAZE	10K	53	1/10W
R557	l-215-869-11			5%	1W F
R558	l-216-047-00	METAL GLAZE	1K0	5%	mow
R559	l-216-083-00	METAL GLAZE	27K	5%	1/10W
R561	l-216-371-00	METAL OXIDE	1.5	5%	2W F
R562	l-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R563	l-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R564	I-216-029-00	METAL GLAZE	150	5%	1/10W
R566	l-216-295-00	METAL GLAZE	0	5%	1/10W
R567	l-216-081-00	METAL GLAZE	22K	5%	1/10W
R568	l-247-700-11	CARBON	100	5%	1/4W F
R570	l-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R571	l-216-085-00	METAL GLAZE	33K	5%	1/10W
R588	I-216-089-00	METAL GLAZE	47K	5%	1/10W
R1517	l-215-920-11	METAL OXIDE	3.3K	5%	3W F
R1520	l-216-091-00	METAL GLAZE	56K	5%	1/10W
R1521	l-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R1522	l-216-097-00	METAL GLAZE	100K	5%	1/10W
R1523	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R1524	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R1525	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R1526	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R1527	l-216-295-00	METAL GLAZE	0	5%	1/10W
R1528	l-216-295-00			5%	1/10W
R1529	I-216-103-00	METAL GLAZE	180K	5%	1/10W
R1530	I-216-081-00	METAL GLAZE	22K	5%	1/10W
R1531	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R1532	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R1533	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1534	l-216-025-00	METAL GLAZE	100	5%	1/10W
R1535	I-216-097-00	METAL GLAZE	100K	5%	1/10W
R1536	l-216-097-00	METAL GLAZE	100K	5%	1/10W
R1537	I-216-081-00	METAL GLAZE	22K	5%	1/10W
R1538	l-216-113-00	METAL GLAZE	470K	5%	1/10W
R1539	l-216-113-00	METAL GLAZE	470K	5%	1/10W
R1540	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R1541	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R1544	l-216-097-00	METAL GLAZE	100K	5%	1/10W
R1545	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R1546	l-216-295-00	METAL GLAZE	0	5%	1/10W
R1547	l-216-075-00	METAL GLAZE	12K	5%	1/10W
R1548	I-216-097-00	METAL GLAZE	100K	5%	1/10W
R1549	I-216-079-00	METAL GLAZE	18K	5%	mow
R1550	l-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R1551	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R1552	I-216-085-00	METAL GLAZE	33K	5%	1/10W
R1553	l-216-081-00	METAL GLAZE	22K	5%	1/10W
R1554	1-247-753-11	CARBON	1.2K	5%	1/2W
R1561	1-247-753-11	CARBON	1.2K	5%	1/2W
R1571	I-215-920-11	METAL OXIDE	3.3K	5%	3W F

<VARIABLE RESISTOR>

RV550	1-237-288-11	RES,	ADJ,	CARBON	47K
RV551	1-238-543-11	RES,	ADJ,	CARBON	470
RV552	l-238-550-11	RES,	ADJ,	CARBON	100K
RV553	I-237-288-11	RES,	ADJ,	CARBON	47K

E D

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REF.NO.	PART NO.	DESCRIPTION	REMARK
RV554	I-230-494-11	RES, ADJ, CARBON 1K	
RV555	l-238-550-11	RES, ADJ, CARBON 100K	
RV556	l-238-550-11	RES. ADJ, CARBON 100K	
RV562	l-230-945-11	RES, ADJ, CARBON 470K	
RV563	l-238-076-11	RES, ADJ, CARBON 5K	
		<SWITCH>	
S551	1-554-186-00	SWITCH, LEVER	
		**********	
	*A-1346-039-A	D BOARD, COMPLETE ********** (KV-27TW75(U),KV-27TW76(U) ONLY)	
	*A-1346-038-A	D BOARD, COMPLETE ********** (KV-27TW75(C),KV-27TW76(C) ONLY)	
	*4-032-238-01	SHIELD, TRANSFORMER	
	*4-032-240-01	SUPPORT, B	
	*4-032-369-01	SHEET, RADIATION	
	*4-341-751-01	EYELET (EY19,EY20,EY25~EY35,EY38~44, EY46,EY48~EY52,EY77,EY78,EY85~EY108)	
	*4-341-752-01	EYELET (EY1,EY2,EY4~EY17,EY21~EY24,EY53, EY54,EY59,EY61,EY62,EY64,EY66~EY68,EY70~ EY72,EY79~EY84)	
	*4-381-724-01	HOLDER, IC	
	4-382-854-11	SCREW (M3X10), P. SW (+)	
	*4-393-401-01	SPRING	
		<CAPACITOR>	
C101	I-124-907-11	ELECT 10MF 50V	
C102	l-126-101-11	ELECT 100MF 20% 16V	
C104	l-126-101-11	ELECT 100MF 5%% 16V	
C105	I-130-481-00	MYLAR 0.0068MF 5% 50V	
C106	I-130-483-00	MYLAR 0.01MF 50V	
C107	l-124-499-11	ELECT 1MF 20% 50V	
C108	I-124-499-11	ELECT IMF 20% 50V	
C109	I-124-499-11	ELECT 1MF 20% 50V	
C110	l-124-903-11	ELECT 1MF 20% 50V	
C111	l-164-039-11	CERAMIC 3PF 0.25PF 50V	
C112	l-126-233-11	ELECT 22MF 20% 50V	
C113	l-164-054-11	CERAMIC 22PF 5% 50V	
C114	l-124-907-11	ELECT 10MF 20% 50V	
C115	l-124-907-11	ELECT 10MF 20% 50V	
C116	I-124-907-11	ELECT 10MF 20% 50V	
C117	l-124-907-11	ELECT 10MF 20% 50V	
Cl18	l-124-907-11	ELECT 10MF 20% 50V	
C119	l-126-233-11	ELECT 22MF 20% 50V	
C120	l-130-483-00	MYLAR 0.01MF 5% 50V	
Cl21	1-101-006-00	CERAMIC 0.047MF 50V	
Cl22	I-164-066-11	CERAMIC 68PF 5% 50V	
Cl23	1-136-161-00	FILM 0.047MF 5% 50V	
Cl24	l-102-978-00	CERAKIC 220PF 5% 50V	
Cl25	I-124-903-11	ELECT 1MF 20% 50V	
Cl26	l-124-907-11	ELECT 10MF 20% 50V	
Cl27	l-164-082-11	CERAMIC 560PF 10% 50V	
Cl28	I-124-477-11	ELECT 47MF 20% 16V	
Cl29	l-130-479-00	MYLAR 0.0047MF 5% 50V	
Cl31	I-124-443-00	ELECT 100MF 20% 10V	
Cl33	I-126-935-11	ELECT 470MF 20% 16V	
Cl34	I-124-360-00	ELECT 1000MF 20% 16V	
Cl35	I-124-360-00	ELECT 1000MF 20% 16V	
Cl36	I-164-066-11	CERAMIC 68PF 5% 50V	
C137	l-164-066-11	CERAMIC 68PF 5% 50V	
Cl38	I-164-066-11	CERAMIC 68PF 5% 50V	
Cl39	I-164-066-11	CERAMIC 68PF 5% 50V	
Cl40	l-164-066-11	CERAMIC 68PF 5% 50V	
Cl41	l-164-066-11	CERAMIC 68PF 5% 50V	
Cl42	l-124-903-11	ELECT 1MF 20% 50V	
Cl43	I-124-360-00	ELECT 1000MF 20% 16V	
C172	1-101-006-00	CERAMIC 0.047MF 50V	
C173	l-102-125-00	CERAMIC 0.0047MF 10% 50V	
Cl74	I-126-935-11	ELECT 470MF 20% 16V	
Cl76	I-126-935-11	ELECT 470MF 20% 16V	
C329	l-124-631-11	ELECT 47MF 20% 16V	
C345	I-124-907-11	ELECT 10MF 20% 50V	
C346	I-124-903-11	ELECT 1MF 20% 50V	
C351	I-124-907-11	ELECT 10MF 20% 50V	
C352	l-124-907-11	ELECT 10MF 20% 50V	
c353	l-124-477-11	ELECT 47MF 20% 16V	
C354	I-124-477-11	ELECT 47MF 20% 16V	
C355	I-126-233-11	ELECT 22MF 20% 25V	
C356	I-126-233-11	ELECT 22MF 20% 25V	
C357	I-124-478-11	ELECT 100MF 20% 25V	
C358	I-124-478-11	ELECT 100MF 20% 25V	
c359	1-101-004-00	CERAMIC 0.01MF 50V	
C360	1-101-004-00	CERAMIC 0.01MF 50V	
C361	I-124-902-00	ELECT 0.47MF 20% 50V	
C363	I-124-477-11	ELECT 47MF 20% 16V	
C430	l-126-233-11	ELECT 22MF 20% 25V	
c431	l-124-907-11	ELECT 10MF 20% 50V	
C432	l-136-167-00	FILM 0.15MF 5% 50V	
C433	l-136-153-00	FILK 0.01MF 5% 50V	
C434	I-136-153-00	FILM 0.01MF 5% 50V	
C435	l-136-167-00	FILM 0.15MF 5% 50V	
C436	l-124-907-11	ELECT 10MF 20% 50V	
C437	l-136-161-00	FILM 0.047MF 5% 50V	
C438	1-124-360-00	ELECT 1000MF 20% 16V	
C439	l-124-119-00	ELECT 330MF 20% 16V	
C440	I-124-907-11	ELECT 10MF 20% 50V	
C441	l-124-907-11	ELECT 10MF 20% 50V	
C442	l-124-907-11	ELECT 10MF 20% 50V	
C445	I-124-903-11	ELECT 1MF 20% 50V	
C446	l-124-903-11	ELECT 1MF 20% 50V	
C501	l-136-173-00	FILM 0.47MF 5% 50V	
C502	l-164-081-11	CERAMIC 470PF 10% 50V	
C503	l-102-244-00	CERAMIC 220PF 10% 500V	
C504	I-136-187-61	FILM 0.047MF 10% 250V	
C505	l-162-116-00	CERAMIC 680PF 10% 2KV	
C506	l-162-116-00	CERAMIC 680PF 10% 2KV	
C507	l-106-371-00	MYLAR 0.015MF 5% 100V	
C508	⚠ 1-162-115-91	CERAKIC 330PF 10% 2KV	
C509	I-123-024-21	ELECT 33MF - 160V	
C510	I-106-395-00	MYLAR 0.15MF 10% 200V	
C511	1-136-113-00	FILM 2MF 5% 200V	
C512	I-124-634-11	ELECT IMF 20% 250V	
C513	I-164-081-11	CERAMIC 470PF 10% 50V	
C514	l-102-228-00	CERAMIC 470PF 10% 500V	
C515	⚠ 1-137-347-11	FILM 0.022MF 3% 2KV	
C516	⚠ 1-136-316-51	FILM 0.056MF 5% 630V	
C517	l-136-124-00	FILM 0.56MF 5% 400V	
C518	l-162-318-11	CERAMIC 0.001MF 10% 500V	
C519	I-124-046-00	ELECT 10MF 20% 160V	
C520	I-102-228-00	CERAMIC 470PF 10% 500V	
C521	l-162-117-00	CERAMIC 100PF 10% 500V	
C522	I-124-922-11	ELECT 1000MF 20% 50V	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C523	l-162-117-00	CERAMIC	100PF	10%	500V
C524	l-124-557-11	ELECT	1000MF	20%	25V
C525	I-123-947-00	ELECT	10MF	20%	250V
C526	1-162-114-00	CERAMIC	0.0047MF		2KV
C527	I-106-383-00	MYLAR	0.047MF		200V
C528	I-106-367-00	MYLAR	0.01MF	5%	100"
C529	I-124-607-11	ELECT	2200MF	20%	50V
C530	l-124-122-11	ELECT	100MF	20%	50V
C532	1-102-030-00	CERAMIC	330PF	10%	500V
c534	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C535	I-123-932-00	ELECT	4.7MF	20%	160V
C536	I-124-477-11	ELECT	47MF	20%	25V
C537	I-164-085-11	CERAMIC	0.001MF	10%	5ov
C539	I-161-959-00	CERAMIC	22PF	10%	500V
C540	l-102-030-00	CERAMIC	330PF	10%	500V
C542	I-124-046-00	ELECT	10MF	20%	160V
C543	I-136-157-00	FILM	0.022MF	5%	50V
C599	I-123-024-21	ELECT	33MF		160"
C602	1-101-006-00	CERAMIC	0.047MF		50V
C603	I-136-165-00	FILM	0.1MF	5%	50V
C604	I-164-646-11	CERAMIC	2200PF	10%	500V
C606	⚠1-162-578-51	CERAMIC	0.0047MF	20%	400".
C607	⚠1-162-578-51	CERAMIC	0.0047MF	20%	400V
C608	⚠1-125-692-11	ELECT(BLOCK)	820MF	~20%	200V
C609	I-164-645-11	CERAMIC	1000PF	10%	500V
C610	I-136-165-00	FILM	0.1MF	5%	50V
C611	I-164-646-11	CERAMIC	2200PF	10%	500V
C612	l-130-959-00	FILM	0.047MF	10%	400V
C613	I-130-959-00	FILM	0.047MF	10%	400V
C614	l-164-645-11	CERAMIC	1000PF	10%	500V
C615	I-123-024-21	ELECT	33MF		160V
C616	I-164-644-11	CERAMIC	330PF	10%	500V
C617	I-136-165-00	FILM	0.1MF	5%	50V
C618	1-124-119-00	ELECT	330MF	20%	16V
C619	I-124-557-11	ELECT	1000MF	20%	25V
C620	l-124-360-00	ELECT	1000MF	20%	16V
C621	l-124-557-11	ELECT	1000MF	20%	25V
C622	l-102-125-00	CERAMIC	0.0047MF	10%	50V
C623	l-124-119-00	ELECT	330MF	20%	16V
C624	⚠1-162-577-51	CERAMIC	0.0022MF	20%	400V
C625	l-126-101-11	ELECT	100MF	20%	16V
C626	⚠1-162-577-51	CERAMIC	0.0022MF	20%	400V
C627	l-102-125-00	CERAMIC	0.0047MF	10%	50V
C633	l-126-101-11	ELECT	100MF	20%	16V
C634	I-124-478-11	ELECT	100MF	20%	25V
C635	1-126-101-11	ELECT	100MF	20%	16V
C636	I-124-907-11	ELECT	10MF	20%	50V
C639	I-126-233-11	ELECT	22MF	20%	25V
C650	1-124-119-00	ELECT	330MF	20%	16V

<BLOCK>

CM351	l-466-162-31	BLOCK, COM FILTER	(CFB-4)

<NETWORK>

CP101	I-236-524-11	NETWORK,	C
CP102	I-236-479-11	NETWORK,	C
CP103	1-236-301-11	NETWORK,	C
CP104	l-236-300-11	NETWORK,	C
CP105	I-236-524-11	NETWORK,	C
CP106	I-236-301-11	NETWORK,	C
CP107	I-236-479-11	NETWORK,	C
CP108	l-236-358-21	NETWORK,	RES

REF.NO.	PART NO.	DESCRIPTION			REMARK

<CONNECTOR>

D1	*1-564-508-11	PLUG, CONNECTOR 5P	
D2	*l-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P	
D3	l-573-298-11	CONNECTOR, BOARD TO BOARD 20P	
D4	I-573-298-11	CONNECTOR, BOARD TO BOARD 20P	
D5	I-573-298-11	CONNECTOR, BOARD TO BOARD 20P	
D7	I-573-297-11	CONNECTOR, BOARD TO BOARD 18P	
D8	*1-564-506-11	PLUG, CONNECTOR 3P	
D9	*l-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
D10	l-573-297-11	CONNECTOR, BOARD TO BOARD 18P	
D15	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
D18	*1-564-507-11	PLUG, CONNECTOR 4P	
D20	*1-564-513-11	PLUG, CONNECTOR 10P	
DY1	*1-568-536-11	PLUG (MINIATURE DY) 6P	
JL21	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	

<DIODE>

D101	a-719-110-78	DIODE	RD33ES-B2
D103	g-719-109-74	DIODE	RD4.3ES-B1
D104	g-719-911-19	DIODE	1SS119
D106	8-719-911-19	DIODE	1SS119
D107	l-809-401-11	LED UNIT	
D108	l-809-401-11	LED UNIT	
D109	8-719-911-19	DIODE	1SS119
D110	R-719-911-19	DIODE	1SS119
D111	g-719-911-19	DIODE	lSSl19
D112	8-719-911-19	DIODE	1SS119
Dl13	g-719-911-19	DIODE	lSSl19
Dl14	8-719-911-19	DIODE	1SS119
D115	8-719-109-84	DIODE	RD5.1ES-B1
Dl16	8-719-109-84	DIODE	RD5.1ES-B1
D117	8-719-911-19	DIODE	1SS119
D118	8-719-911-19	DIODE	lSSl19
D119	8-719-109-84	DIODE	RD5.1ES-B1
D120	8-719-911-19	DIODE	1SS119
D431	8-719-911-19	DIODE	1SS119
D432	S-719-911-19	DIODE	1SS119
D433	8-719-911-19	DIODE	1SS119
D434	8-719-911-19	DIODE	lSSl19
D504	S-719-945-80	DIODE	ERC06-15S
D505	R-719-945-80	DIODE	ERC06-15S
D506	8-719-900-26	DIODE	ERD29-08J
D507	8-719-302-43	DIODE	EL1Z
D508	g-719-971-20	DIODE	ERC38-06
D509	8-719-979-85	DIODE	EGP20G
D510	8-719-300-33	DIODE	RU-3AM
D511	8-719-976-64	DIODE	RGP02-17
D512	8-719-200-02	DIODE	10E2
D516	8-719-911-19	DIODE	1SS119
D517	g-719-109-92	DIODE	RD6.2ES-B1
D531	l-130-777-71	FILM	0.1MF 10% 100V
D533	l-130-777-71	FILM	0.1MF 10% 100"
D601	8-719-911-19	DIODE	1SS119
D602	⚠8-719-510-63	DIODE	D4SB60L-F
D603	8-719-510-48	DIODE	D1N20R
D604	a-719-510-48	DIODE	D1N20R
D605	8-719-510-48	DIODE	D1N20R
D606	8-719-510-48	DIODE	D1N20R
D607	8-719-510-64	DIODE	S2LA20F
D608	g-719-510-64	DIODE	S2LA20F
D609	a-719-510-64	DIODE	S2LA20F

D

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REF.NO.	PART NO.	DESCRIPTION	REMARK
D610	8-719-510-64	DIODE S2LA20F	
D611	g-719-911-19	DIODE 1SS119	
D612	8-719-510-02	DIODE DINS4	
D613	g-719-911-19	DIODE 1SS119	
D614	g-719-510-02	DIODE DINS4	
D615	8-719-510-02	DIODE DINS4	
D616	8-719-510-02	DIODE DINS4	
D617	8-719-510-02	DIODE DINS4	
D618	g-719-510-02	DIODE DINS4	
D619	8-719-510-02	DIODE DINS4	
D620	8-719-510-02	DIODE DINS4	
D621	g-719-991-18	DIODE EGP30GL-6072	
D622	S-719-510-02	DIODE DINS4	
		<FUSE>	
F602	⚠ 1-576-105-21	FUSE 2.5A/250V	
	1-533-223-11	CLIP, FUSE: F602	
		<FERRITE BEAD>	
FB101	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB601	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB602	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB603	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB604	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB605	I-410-396-41	FERRITE BEAD INDUCTOR	
		<IC>	
IC101	g-759-053-73	IC MC68HC05T7-LSC89921B	
IC102	g-759-500-31	IC X24C01P	
IC103	8-741-100-62	IC SBX1618-51	
IC104	8-759-987-89	IC TDA8444	
IC105	g-759-924-12	IC LM7805CT	
IC352	8-759-982-34	IC RC78M09FA	
IC354	g-759-710-68	IC NJM2245S	
IC355	g-759-710-68	IC NJM2245S	
IC431	g-759-820-63	IC LA7953	
IC501	g-759-402-35	IC AN5521	
IC601	⚠ 1-809-120-21	MODULE, POWER (DM-43)	
IC602	8-719-156-73	PHOTO COUPLER PS2501-1LB	
IC605	8-759-929-62	IC LM7812CT	
IC606	g-759-924-12	IC LM7805CT	
IC607	g-719-156-73	PHOTO COUPLER PS2501-1LB	
		<JACK>	
J403	I-573-659-11	JACK BLOCK, PIN 3P	
		<COIL>	
L101	1-412-911-11	INDUCTOR, FERRITE BEAD	
L102	1-412-911-11	INDUCTOR, FERRITE BEAD	
L106	I-410-669-31	INDUCTOR 33UH	
L502	I-422-613-11	COIL, AIR CORE	
L503	I-459-313-00	COIL WITH CORE (HWC)	
L504	I-459-104-00	COIL, DUST CORE	
L505	I-408-239-00	INDUCTOR 4.7MMH	
L506	⚠ 1-460-173-21	COIL, HORIZONTAL LINEARITY	
L507	I-459-075-00	COIL,DYNAMIC CONVERSION CHOKE	
L508	1-412-519-11	INDUCTOR 3.3UH	
L509	I-412-529-11	INDUCTOR 22UH	
L511	I-408-698-00	INDUCTOR 8.2UH	
L512	I-412-045-11	INDUCTOR 2.2MMH	
L513	I-408-300-00	INDUCTOR 6.8UH	
		<MODULE>	
PM501	⚠ 1-809-492-11	'MODULE, PROTECTOR (PM-23)	
		<TRANSISTOR>	
Q101	g-729-119-78	TRANSISTOR 2SC2785-HFE	
Q103	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q104	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q105	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q106	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q107	g-729-119-76	TRANSISTOR 2SA1175-HFE	
Q108	g-729-119-78	TRANSISTOR 2SC2785-HFE	
Q109	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q122	g-729-900-89	TRANSISTOR DTC144ES	
8344	8-729-119-78	TRANSISTOR 2SC2785-HFE	
8345	8-729-119-78	TRANSISTOR 2SC2785-HFE	
8346	8-729-119-78	TRANSISTOR 2SC2785-HFE	
8434	g-729-119-78	TRANSISTOR 2SC2785-HFE	
Q435	g-729-119-78	TRANSISTOR 2SC2785-HFE	
Q436	g-729-119-76	TRANSISTOR 2SA1175-HFE	
Q437	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q438	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q439	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q501	g-729-119-80	TRANSISTOR 2SC2688-LK	
Q502	g-729-304-50	TRANSISTOR 2SD1941-06	
Q503	g-729-141-89	TRANSISTOR 2SD1585-LK	
Q504	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q505	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q601	8-729-927-22	TRANSISTOR 2SC4664MNP-F	
Q602	8-729-927-22	TRANSISTOR 2SC4664MNP-F	
Q603	g-729-920-92	TRANSISTOR 2SD2096-EF	
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q605	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q610	g-729-200-17	TRANSISTOR 2SA1091-O	
Q613	g-729-931-43	TRANSISTOR 2SC4274-02F9	
Q614	g-729-927-12	TRANSISTOR 2SC4115SQR	
		<RESISTOR>	
R101	I-249-405-11	CARBON 100 5% 1/4W	
R102	1-249-409-11	CARBON 220 5% 1/4W	
R103	1-249-409-11	CARBON 220 5% 1/4W	
R104	I-249-409-11	CARBON 220 5% 1/4W	
R105	1-249-429-11	CARBON 10K 5% 1/4W	
R106	I-249-437-11	CARBON 47K 5% 1/4W	
R107	1-249-409-11	CARBON 220 5% 1/4W	
R108	1-249-413-11	CARBON 470 5% 1/4W	
R109	1-249'413-11	CARBON 470 5% 1/4W	
R110	I-249-413-11	CARBON 470 5% 1/4W	
R111	I-249-409-11	CARBON 220 5% 1/4W	
R112	I-249-409-11	CARBON 220 5% 1/4W	
R113	I-249-417-11	CARBON 1K 5% 1/4W	
R114	I-249-409-11	CARBON 220 5% 1/4W	
R116	I-215-405-00	METAL 220 1% 1/4W	
R117	I-249-409-11	CARBON 220 5% 1/4W	
RI18	I-249-409-11	CARBON 220 5% 1/4W	
R119	1-249-429-11	CARBON 10K 5% 1/4W	
R120	I-249-409-11	CARBON 220 5% 1/4W	
R121	1-249-425-11	CARBON 4.7K 5% 1/4W	

D

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REF.NO.	PART NO.	DESCRIPTION					REMARK
R122	l-249-409-11	CARBON		220	5%	1/4W	
R123	I-249-409-11	CARBON		220	5%	1/4W	
RI24	I-249-409-11	CARBON		220	5%	1/4W	
R125	I-249-430-11	CARBON		12K	5%	1/4W	
R126	l-215-433-00	KETAL		3.3K	1%	1/4W	
R127	I-215-425-00	METAL		1.5K	1%	1/4W	
R128	1-249-431-11	CARBON		15K	5%	1/4W	
R129	1-249-417-11	CARBON		1K	5%	1/4W	
R130	1-249-421-11	CARBON		2.2K	5%	1/4W	
R131	I-249-429-11	CARBON		10K	5%	1/4W	
R132	1-249-429-11	CARBON		10K	5%	1/4W	
R133	l-249-409-11	CARBON		220	5%	1/4W	
R134	l-249-409-11	CARBON		220	5%	1/4W	
R135	l-249-409-11	CARBON		220	5%	1/4W	
R136	l-249-409-11	CARBON		220	5%	1/4W	
R137	l-249-409-1 1	CARBON		220	5%	1/4W	
R138	I-249-409-1 1	CARBON		220	5%	1/4W	
R139	l-249-409-1 1	CARBON		220	5%	1/4W	
R140	1-249-409-I 1	CARBON		220	5%	1/4W	
R141	l-249-409-1 1	CARBON		220	5%	1/4W	
R142	1-249-409-l 1	CARBON		220	5%	1/4W	
R143	l-249-409-1 1	CARBON		220	5%	1/4W	
R144	1-249-409-I 1	CARBON		220	5%	1/4W	
R145	1-249-421-1 1	CARBON		2.2K	5%	1/4W	
R146	1-249-421-1 1	CARBON		2.2K	5%	1/4W	
R147	1-249-421-11	CARBON		2.2K	5%	1/4W	
R148	l-249-409-11	CARBON		220	5%	1/4W	
R149	l-249-409-11	CARBON		220	5%	1/4W	
R150	l-249-409-11	CARBON		220	5%	1/4W	
R151	I-249-429-11	CARBON		10K	5%	1/4W	
R152	l-249-409-11	CARBON		220	5%	1/4W	
R153	1-249-429-11	CARBON		10K	5%	1/4W	
R154	1-249-437-11	CARBON		47K	5%	1/4W	
R155	1-249-417-11	CARBON		1K	5%	1/4W	
R156	l-249-409-11	CARBON		220	5%	1/4W	
R157	1-249-417-11	CARBON		1K	5%	1/4W	
R158	I-249-429-11	CARBON		10K	5%	1/4W	
R159	1-249-429-11	CARBON		10K	5%	1/4W	
R160	l-249-405-11	CARBON		100	5%	1/4W	
R161	I-215-923-00	KETAL	OXIDE	10K	5%	3W	F
R162	1-249-417-11	CARBON		1K	5%	1/4W	
R163	I-247-883-00	CARBON		150K	5%	1/4W	
R164	1-249-437-11	CARBON		47K	5%	1/4W	
R165	l-247-883-00	CARBON		150K	5%	1/4W	
R166	1-249-437-11	CARBON		47K	5%	1/4W	
R167	I-247-883-00	CARBON		150K	53	1/4W	
				47K	5%	1/4W	
R169	l-249-427-11	CARBON		6.8K	5%	1/4W	
R170	1-249-429-11	CARBON		10K	5%	1/4W	
R171	l-249-435-11	CARBON		33K	5%	1/4W	
R172	l-215-445-00	METAL		10K	1%	1/4W	
R173	l-215-437-00	HETAL		4.7K	1%	1/4W	
R174	1-249-428-11	CARBON		8.2K	5%	1/4W	
R175	1-249-425-11	CARBON		4.7K	5%	1/4W	
R176	l-249-440-11	CARBON		82K	5%	1/4W	
R177	I-215-439-00	METAL		5.6K	1%	1/4W	
R178	I-215-437-00	METAL		4.7K	1%	1/4W	
R179	1-249-427-11	CARBON		6.8K	5%	1/4W	
RI81	1-249-425-11	CARBON		4.7K	5%	1/4W	
RI82	l-249-409-11	CARBON		220	5%	1/4W	
R184	1-249-429-11	CARBON		10K	5%	1/4W	
R186	I-247-903-00	CARBON		1M	5%	1/4W	
R187	l-249-441-11	CARBON		100K	5%	1/4W	
R188	I-247-903-00	CARBON		1M	5%	1/4W	
R189	1-249-429-11	CARBON		10K	5%	1/4W	
RI90	I-249-429-11	CARBON		10K	5%	1/4W	
R191	1-249-429-11	CARBON		10K	5%	1/4W	
R192	1-249-427-11	CARBON		6.8K	5%	1/4W	
R193	1-249-425-11	CARBON		4.7K	5%	1/4W	
R194	1-249-429-11	CARBON		10K	5%	1/4W	
R195	1-249-429-11	CARBON		10K	5%	1/4W	
R196	1-249-429-11	CARBON		10K	5%	1/4W	
R197	l-249-423-11	CARBON		3.3K	5%	1/4W	
R199	1-249-429-11	CARBON		10K	5%	1/4W	
R345	1-249-425-11	CARBON		4.7K	5%	1/4W	
R346	1-249-436-11	CARBON		39K	5%	1/4W	
R347	1-249-435-11	CARBON		33K	5%	1/4W	
R348	1-249-429-11	CARBON		10K	5%	1/4W	
R349	1-249-429-11	CARBON		10K	5%	1/4W	
R350	1-249-429-11	CARBON		10K	5%	1/4W	
R351	1-249-429-11	CARBON		10K	5%	1/4W	
R352	1-249-425-11	CARBON		4.7K	5%	1/4W	
R353	l-249-417-11	CARBON		1K	5%	1/4W	
R354	1-249-414-11	CARBON		560	5%	1/4W	
R355	1-249-414-11	CARBON		560	5%	1/4W	
R356	l-249-414-11	CARBON		560	5%	1/4W	
R357	1-249-414-11	CARBON		560	5%	1/4W	
R358	1-249-414-11	CARBON		560	5%	1/4W	
R359	1-249-414-11	CARBON		560	5%	1/4W	
R360	1-249-415-11	CARBON		680	5%	1/4W	
R361	1-249-417-11	CARBON		1K	5%	1/4W	
R363	l-249-405-11	CARBON		100	5%	1/4W	
R364	l-249-429-11	CARBON		10K	5%	1/4W	
R365	1-249-437-11	CARBON		47K	5%	1/4W	
R367	I-249-415-11	CARBON		680	5%	1/4W	
R369	I-249-405-11	CARBON		100	5%	1/4W	
R431	1-249-425-11	CARBON		4.7K	5%	1/4W	
R432	1-249-425-11	CARBON		4.7K	5%	1/4W	
R433	l-249-425-11	CARBON		4.7K	5%	1/4W	
R434	l-249-426-11	CARBON		5.6K	5%	1/4W	
R435	1-249-426-11	CARBON		5.6K	5%	1/4W	
R436	I-249-426-11	CARBON		5.6K	5%	1/4W	
R437	1-249-426-11	CARBON		5.6K	5%	1/4W	
R438	1-249-423-11	CARBON		3.3K	5%	1/4W	
R439	1-249-425-11	CARBON		4.7K	5%	1/4W	
R440	I-249-428-11	CARBON		8.2K	5%	1/4W	
R441	1-249-428-11	CARBON		8.2K	5%	1/4W	
R442	1-249-421-11	CARBON		2.2K	5%	1/4W	
R443	l-249-417-11	CARBON		1K	5%	1/4W	
R444	1-249-423-11	CARBON		3.3K	5%	1/4W	
R445	1-249-429-11	CARBON		10K	5%	1/4W	
R446	1-249-429-11	CARBON		10K	5%	1/4W	
R447	l-249-405-11	CARBON		100	5%	1/4W	
R448	!-249-417-11	CARBON		1K	5%	1/4W	
R449	I-249-405-11	CARBON		100	5%	1/4W	
R450	1-249-391-11	CARBON		6.8	5%	1/4W	
R451	l-249-402-11	CARBON		56	5%	1/4W	
R452	l-249-409-11	CARBON		220	5%	1/4W	
R455	1-249-417-11	CARBON		1K	5%	1/4W	
R456	I-249-405-11	CARBON		100	5%	1/4W	
R457	l-249-405-11	CARBON		100	5%	1/4W	
R494	I-249-405-11	CARBON		100	5%	1/4W	
R497	I-249-405-11	CARBON		100	5%	1/4W	
R501	l-249-405-11	CARBON		100	5%	1/4W	
R502	1-249-423-11	CARBON		3.3K	5%	1/4W	
R503	1-249-426-11	CARBON		5.6K	5%	1/4W	F
R504	⚠1-215-918-51	METAL	OXIDE	1.5K	-5%	3W	F

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R505	l-216-342-11	METAL OXIDE	0.27	5%	1W	F
R506	l-249-401-11	CARBON	47	5%	1/4W	
R507	I-249-427-11	CARBON	6.8K	5%	1/4W	
R508	1-249-455-11	CARBON	4.7	5%	1/4W	F
R509	1-249-423-11	CARBON	3.3K	5%	1/4W	
R510	I-215-896-00	METAL OXIDE	4.7K	5%	2W	F
R512	l-215-861-00	METAL OXIDE	47	5%	1W	F
R513	l-249-417-11	CARBON	1K	5%	1/4W	
R514	⚠1-249-415-91	CARBON	680	5%	1/4W	F
R515	1-249-421-11	CARBON	2.2K	5%	1/4W	
R517	1-249-417-11	CARBON	1K	5%	1/4W	
R518	1-249-417-11	CARBON	1K	5%	1/4W	
R519	l-249-405-11	CARBON	100	5%	1/4W	
R520	1-249-389-11	CARBON	4.7	5%	1/4W	F
R521	1-249-448-11	CARBON	1.2	5%	1/4W	F
R522	1-216-375-00	METAL OXIDE	3.3	5%	2W	F
R523	⚠1-216-345-91	METAL OXIDE	0.47	5%	1W	F
R524	1-216-373-11	METAL OXIDE	2.2	5%	2W	F
R525	⚠1-249-448-91	CARBON	1.2	5%	1/4W	F
R526	⚠1-216-434-91	METAL OXIDE	1.8K	5%	1W	F
R527	l-216-429-00	METAL OXIDE	270	5%	1W	F
R529	1-249-429-11	CARBON	10K	5%	1/4W	
R530	l-249-436-11	CARBON	39K	5%	1/4W	
R534	1-249-435-11	CARBON	33K	5%	1/4W	
R535	l-215-373-31	METAL	10	1%	1/4W	
R536	l-249-425-11	CARBON	4.7K	5%	1/4W	
R538	l-202-838-00	SOLID	100K	10%	1/2W	
R539	I-202-838-00	SOLID	100K	10%	1/2W	
R540	l-202-838-00	SOLID	100K	10%	1/2W	
R541	l-202-838-00	SOLID	100K	10%	1/2W	
❎R542	⚠	METAL			1/4W	
❎R543	⚠	METAL			1/4W	
R544	l-249-429-11	CARBON	10K	5%	1/4W	
R545	1-249-417-11	CARBON	1K	5%	1/4W	
R546	1-249-417-11	CARBON	1K	5%	1/4W	F
R547	l-202-833-11	SOLID	18K	10%	1/2W	
R548	I-216-369-00	METAL OXIDE	1	5%	2W	F
		(KV-27TW75(U),KV-27TW76(U) ONLY)				
R603	l-215-900-11	METAL OXIDE	22K	5%	2W	F
R604	⚠1-216-444-91	METAL OXIDE	82K	5%	1W	F
R605	I-216-369-00	METAL OXIDE	1	5%	2W	F
R606	l-215-878-00	METAL OXIDE	33K	5%	1W	F
R607	1-216-377-11	METAL OXIDE	4.7	5%	2W	F
R609	l-216-369-00	METAL OXIDE	1	5%	2W	F
R610	l-215-878-00	METAL OXIDE	33K	5%	1W	F
R611	l-207-645-00	WIREWOUND	0.47	5%	3W	F
R612	l-215-417-00	METAL	680	1%	1/4W	
R613	l-215-477-00	METAL	220K	1%	1/4W	
R614	1-249-441-11	CARBON	100K	5%	1/4W	
R615	1-249-429-11	CARBON	10K	5%	1/4W	
R616	l-247-895-00	CARBON	470K	5%	1/4W	
R617	l-216-377-11	METAL OXIDE	4.7	5%	2W	F
R619	l-249-421-11	CARBON	2.2K	5%	1/4W	
R620	l-247-708-11	CARBON	470	5%	1/4W	F
R621	l-249-429-11	CARBON	10K	5%	1/4W	
R622	1-247-747-11	CARBON	470	5%	1/2W	F
R623	I-249-405-11	CARBON	100	5%	1/4W	F
R626	1-249-389-11	CARBON	4.7	5%	1/4W	F
R628	1-249-423-11	CARBON	3.3K	5%	1/4W	
R629	1-249-416-11	CARBON	820	5%	1/4W	
R630	1-249-416-11	CARBON	820	5%	1/4W	
R631	⚠1-202-730-91	SOLID	8.2M	10%	1/2W	
R632	1-215-892-11	HETAL OXIDE	1K	5%	2W	F
R633	1-216-426-11	METAL OXIDE	82	5%	1W	F

REF.NO.	PART NO.	DESCRIPTION				REMARK
R640	1-216-379-11	METAL OXIDE	6.8	5%	2W	F
R645	1-216-393-11	METAL OXIDE	6.8	5%	2W	F
			10	5%	1/4W	
R647	1-249-385-11	CARBON	2.2	5%	1/4W	F
R648	1-249-393-11	CARBON	10	5%	1/4W	F
R649	l-249-409-11	CARBON	220	5%	1/4W	
R650	1-247-713-11	CARBON	1K	5%	1/4W	F
R651	1-249-377-11	CARBON	0.47	5%	1/4W	F
R652	1-249-377-11	CARBON	0.47	5%	1/4W	F
R653	1-249-377-11	CARBON	0.47	5%	1/4W	F
R654	1-249-377-11	CARBON	0.47	5%	1/4W	F
R655	1-249-377-11	CARBON	0.47	5%	1/4W	F
R656	1-249-377-11	CARBON	0.47	5%	1/4W	F
R657	1-249-377-11	CARBON	0.47	5%	1/4W	F
R658	1-249-377-11	CARBON	0.47	5%	1/4W	F
R659	l-249-377-11	CARBON	0.47	5%	1/4W	F

<VARIABLE RESISTOR>

RV101 l-238-023-11 RES, ADJ, CARBON 470K

<SWITCH>

S101 ⚠1-571-532-23 SWITCH, TACTIL (POWER)
S102 1-571-532-21 SWITCH, TACTIL
S103 1-571-532-21 SWITCH, TACTIL
S104 1-571-532-21 SWITCH, TACTIL
S105 1-571-532-21 SWITCH, TACTIL

S106 1-571-532-21 SWITCH, TACTIL

<SPARK GAP>

SG501 1-519-422-11 GAP, SPARK

<TRANSFORMER>

T501 ⚠1-437-195-13 TRANSFORMER, HORIZONTAL DRIVE
T502 ⚠1-424-545-21 TRANSFORMER, FERRITE (PMT)
T503 ⚠1-439-502-11 TRANSFORMER ASSY, FLYBACK (NX-2600A3)
T603 ⚠1-450-270-12 TRANSFORMER, CONVERTER (CDT)
T604 ⚠1-450-559-11 TRANSFORMER, CONVERTER (PRT)

T605 ⚠1-450-560-11 TRANSFORMER, FERRITE (SBT)

<TUNER>

TU101 ⚠1-465-371-11 TUNER, ET (BTP-RA401)
(KV-27TW75(U),KV-27TW76(U) ONLY)
⚠1-465-371-21 TUNER, ET (BTP-RA401)
(KV-27TW75(C),KV-27TW76(C) ONLY)

<CRYSTAL>

X101 I-577-082-11 VIBRATOR, CERAMIC

****

A-1347-053-A V BOARD! COMPLETE
****

<CAPACITOR>

Cl201	l-124-903-11	ELECT	1MF	20%	50V
Cl202	l-163-117-00	CERAMIC CHIP	100PF	5%	50V
Cl203	l-124-903-11	ELECT	1MF	20%	50V

- The components identified by ❑ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation Should replacement be required, replace only with the value originally used

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1204	1-124-903-11	ELECT	1MF	20% 50V	
C1205	I-124-927-11	ELECT	4.7MF	20% 50V	
C1206	l-163-117-00	CERAMIC CHIP	100PF	5% 50V	
C1207	I-124-927-11	ELECT	4.7MF	20% 50V	
C1208	l-163-117-00	CERAMIC CHIP	100PF	5% 50V	
C1209	I-126-101-11	ELECT	100MF	20% 16V	
C1210	I-163-037-11	CERAMIC CHIP	0.022MF	10% 25V	
C1211	l-163-093-00	CERAMIC CHIP	10PF	5% 50V	
C1212	I-163-093-00	CERAMIC CHIP	10PF	5% 50V	
C1213	l-163-141-00	CERAMIC CHIP	0.001MF	5% 50V	
C1214	l-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1215	l-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1216	l-163-101-00	CERAMIC CHIP	22PF	5% 50V	
C1217	l-163-141-00	CERAMIC CHIP	0.001MF	5% 50V	
C1218	l-163-101-00	CERAMIC CHIP	22PF	5% 50V	
C1219	l-163-113-00	CERAMIC CHIP	68PF	5% 50V	
C1220	I-163-113-00	CERAMIC CHIP	68PF	5% 50V	
C1221	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1222	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1223	I-124-925-11	ELECT	2.2MF	20% 50V	
C1224	I-124-925-11	ELECT	2.2MF	20% 50V	
C1225	1-163-101-00	CERAMIC CHIP	22PF	5% 50V	
C1226	l-163-101-00	CERAMIC CHIP	22PF	5% 50V	
C1227	I-163-093-00	CERAMIC CHIP	10PF	5% 50V	
C1228	l-163-117-00	CERAMIC CHIP	100PF	5% 50V	
C1229	I-163-117-00	CERAMIC CHIP	100PF	5% 50V	
C1230	l-163-117-00	CERAMIC CHIP	100PF	5% 50V	
C1231	l-124-902-00	ELECT	0.47MF	20% 50V	
C1232	I-136-171-00	FILM	0.33MF	5% 50V	
C1233	I-126-529-11	ELECT	0.47MF	20% 50V	
C1234	I-163-237-11	CERAMIC CHIP	27PF	5% 50V	
C1235	l-124-903-11	ELECT	1MF	20% 50V	
C1236	1-126-101-11	ELECT	100MF	20% 16V	
C1237	I-136-169-00	FILM	0.22MF	5% 50V	
C1238	l-124-907-11	ELECT	10MF	20% 50V	
C1239	I-136-169-00	FILM	0.22MF	5% 50V	
C1240	I-163-237-11	CERAMIC CHIP	27PF	5% 50V	
C1241	I-163-037-11	CERAMIC CHIP	0.022MF	10% 25V	
C1242	l-163-114-00	CERAMIC CHIP	75PF	5% 50V	
C1243	l-126-101-11	ELECT	100MF	20% 16V	
C1244	I-163-125-00	CERAMIC CHIP	220PF	5% 50V	
C1245	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1248	l-124-477-11	ELECT	47MF	20% 16V	
C1250	I-124-477-11	ELECT	47KF	20% 16V	
C1251	I-126-233-11	ELECT	22KF	20% 25V	
C1252	I-124-477-11	ELECT	47KF	20% 16V	
C1253	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1254	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1255	I-124-477-11	ELECT	47MF	20% 16V	
C1256	l-124-477-11	ELECT	47MF	20% 16V	
C1257	I-124-477-11	ELECT	47KF	20% 16V	
C1258	l-124-477-11	ELECT	47KF	20% 16V	
C1259	l-126-101-11	ELECT	100MF	20% 16V	
C1260	I-136-173-00	FJLH	0.47MF	5% 50V	
C1261	I-124-477-11	ELECT	47MF	20% 16V	
C1262	I-124-477-11	ELECT	47MF	20% 16V	
C1263	l-124-477-11	ELECT	47MF	20% 16V	
C1264	l-164-004-11	CERAMIC CHIP	0.1MF	10% 25V	
C1265	l-163-093-00	CERAMIC CHIP	10PF	5% 50V	
C1266	l-164-004-11	CERAMIC CHIP	0.1MF	10% 25V	
C1267	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1268	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1269	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1270	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1271	1-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1272	1-124-477-11	ELECT	47MF	20% 16V	
C1273	1-124-477-11	ELECT	47MF	20% 16V	
C1275	1-164-161-11	CERAMIC CHIP	0.0022MF	10% 50V	
C1276	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1277	l-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1278	l-136-165-00	FILM	0.1MF	5% 50V	
C1279	l-164-004-11	CERAMIC CHIP	0.1MF	10% 25V	
C1280	l-164-004-11	CERAMIC CHIP	0.1MF	10% 25V	
C1281	l-164-004-11	CERAMIC CHIP	0.1MF	10% 25V	
C1282	I-164-232-11	CERAMIC CHIP	0.01MF	10% 50V	
C1283	l-164-004-11	CERAMIC CHIP	0.1MF	10% 25V	
C1287	l-164-004-11	CERAMIC CHIP	0.1MF	10% 25V	
C1288	l-126-103-11	ELECT	470MF	20% 16V	
C1290	l-163-101-00	CERAMIC CHIP	22PF	5% 50V	

<DIODE>

D1202	g-719-404-46	DIODE	MA110

<FILTER>

FL1200	I-239-140-11	FILTER,	LOW PASS

<IC>

IC1200	8-759-517-74	IC	MB81461-12-PSZ-G-BF2
IC1201	g-759-512-86	IC	MB86140P-SH
IC1202	8-759-983-44	IC	MB40176P
IC1203	g-759-512-85	IC	MB3511P-SH
IC1204	g-759-711-23	IC	NJM2234L
IC1205	g-759-711-23	IC	NJM2234L

<COIL>

L1200	l-408-421-00	INDUCTOR	100UH
L1201	I-408-419-00	INDUCTOR	68UH
L1202	l-408-421-00	INDUCTOR	100UH
L1203	I-408-419-00	INDUCTOR	68UH
L1204	l-408-413-00	INDUCTOR	22UH
L1205	l-408-421-00	INDUCTOR	100UH

<TRANSISTOR>

Q1201	g-729-216-22	TRANSISTOR	2SA1162-G
Q1202	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q1203	g-729-920-74	TRANSISTOR	2SC2412K-QR
81204	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q1205	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q1206	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q1207	g-729-920-74	TRANSISTOR	2SC2412K-QR
81208	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q1209	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q1210	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q1211	8-729-216-22	TRANSISTOR	2SA1162-G
Q1212	g-729-920-74	TRANSISTOR	2SC2412K-QR
Q1213	g-729-920-74	TRANSISTOR	2SC2412K-QR

<RESISTOR>

JR1201	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR1202	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR1205	I-216-295-00	METAL GLAZE	0	5%	1/10W

V

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité Ne les remplacer que par des pièces de numéro spécifié

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR1208	I-216-295-00	METAL GLAZE	0	5%	1/10W	
JR1210	I-216-295-00	METAL GLAZE	0	5%	1/10W	
JR1211	l-216-295-00	METAL GLAZE	0	5%	1/10W	
R1201	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1203	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1204	I-216-295-00	METAL GLAZE	0	5%	1/10W	
R1205	I-216-025-00	METAL GLAZE	100	5%	1/10W	
RI206	I-216-047-00	METAL GLAZE	820	5%	1/10W	
R1207	l-216-027-00	METAL GLAZE	120	5%	1/10W	
R1208	I-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
RI209	I-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1210	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1211	I-216-047-00	METAL GLAZE	820	5%	1/10W	
RI212	I-216-121-00	METAL GLAZE	1M	5%	1/10W	
R1213	l-216-049-00	METAL GLAZE	IK	5%	1/10W	
R1214	l-216-121-00	METAL GLAZE	1M	5%	1/10W	
R1215	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
RI216	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1217	I-216-043-00	METAL GLAZE	560	5%	1/10W	
R1218	I-216-043-00	METAL GLAZE	560	5%	1/10W	
R1219	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1220	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1221	1-216-115-00	METAL GLAZE	560K	5%	1/10W	
RI222	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1223	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1224	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1225	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
RI226	I-216-043-00	METAL GLAZE	560	5%	1/10W	
RI227	l-216-043-00	METAL GLAZE	560	5%	1/10W	
R1228	I-216-043-00	METAL GLAZE	560	5%	1/10W	
RI229	I-216-043-00	METAL GLAZE	560	5%	1/10W	
R1230	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1231	l-216-045-00	METAL GLAZE	680	5%	1/10W	
RI232	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
RI233	l-216-115-00	METAL GLAZE	560K	5%	1/10W	
R1234	I-216-047-00	METAL GLAZE	820	5%	1/10W	
RI235	I-216-025-00	METAL GLAZE	100	5%	1/10W	
RI236	I-216-043-00	METAL GLAZE	560	5%	1/10W	
RI237	I-216-025-00	METAL GLAZE	100	5%	1/10W	
R1238	I-216-079-00	METAL GLAZE	18K	5%	1/10W	
RI239	l-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1240	l-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1241	l-216-025-00	METAL GLAZE	100	5%	1/10W	
RI242	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1243	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
RI245	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
RI246	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
RI247	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1248	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
RI249	I-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1250	I-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1251	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
RI252	l-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1253	l-216-073-00	METAL GLAZE	10K	5%	1/10W	
RI254	I-216-025-00	METAL GLAZE	100	5%	1/10W	
RI255	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
RI256	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1257	l-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1258	I-216-073-00	METAL GLAZE	10K	5%	1/10W	
RI259	I-216-025-00	METAL GLAZE	100	5%	1/10W	
R1260	l-216-043-00	METAL GLAZE	560	5%	1/10W	
R1261	l-216-073-00	METAL GLAZE	10K	5%	1/10W	
RI262	l-216-073-00	METAL GLAZE	10K	5%	1/10W	
RI263	I-216-025-00	METAL GLAZE	100	5%	1/10W	
RI264	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
11265	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1266	l-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1267	I-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R1268	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1269	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1272	l-216-033-00	METAL GLAZE	220	5%	1/10W	
11273	I-216-033-00	METAL GLAZE	220	5%	1/10W	
R1274	l-216-033-00	METAL GLAZE	220	5%	1/10W	
R1275	l-216-033-00	METAL GLAZE	220	5%	1/10W	
R1276	I-216-033-00	METAL GLAZE	220	5%	1/10W	
R1277	I-216-025-00	METAL GLAZE	100	5%	1/10W	
R1278	l-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
11279	I-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1280	I-216-049-00	METAL GLAZE	1K	5%	1/10W	

<CONNECTOR>

V11	*1-564-514-11	PLUG, CONNECTOR	11P
V20	*1-564-513-11	PLUG, CONNECTOR	10P

<CRYSTAL>

R1201	I-527-722-00	OSCILLATOR,	CRYSTAL
R1202	l-527-722-00	OSCILLATOR,	CRYSTAL

'MISCELLANEOUS'

A-1-426-350-11	COIL,	DEMAGNETIZATION
⚠1-451-275-31	DEFLECTION YOKE	(Y28PFA)
l-452-032-00	MAGNET,	DISK; 10MM ϕ
l-452-094-00	MAGNET,	ROTATABLE DISK; 15MM ϕ
l-544-549-11	SPEAKER	
1-573-657-11	PLUG,	F-PIN
⚠1-590-492-21	CORD,	POWER (WITH CONNECTOR)
V901 ⚠8-737-753-05	PICTURE TUBE	(A68JMT50X)

ACCESSORIES AND PACKING MATERIALS

PART NO.	DESCRIPTION	REMARK
l-417-182-11	CONVERTER (EAC-25)	(KV-27TW75(C),KV-27TW76(C) ONLY)
l-562-443-11	CONNECTOR, ANTENNA	(KV-27TW75(U),KV-27TW76(U) ONLY)
2-300-016-00	LABEL, GLASS, REINFORCEMENT	
*4-030-731-01	INDIVIDUAL CARTON	
*4-030-732-01	CUSHION (UPPER) (ASSY)	
*4-030-733-01	CUSHION (LOWER) (ASSY)	
4-032-388-21	MANUAL, INSTRUCTION	
4-032-388-31	MANUAL, INSTRUCTION	(KV-27TW75(C),KV-27TW76(C) ONLY)
4-032-388-41	MANUAL, INSTRUCTION	(KV-27TW75(U),KV-27TW76(U) ONLY)
4-306-034-00	FLANGE NUT (B) 5MM	(KV-27TW75(C),KV-27TW76(C) ONLY)
*4-395-035-01	BAG, PROTECTION	
7-683-340-07	BOLT, HEXAGON 5X20	(KV-27TW75(C),KV-27TW76(C) ONLY)
7-685-663-79	SCREW +BVTP 4X16 TYPE2 TT-3	(KV-27TW75(C),KV-27TW76(C) ONLY)

REMOTE COMMANDER

I-465-773-11	REMOTE COMMANDER	(RM-Y102)
9-998-985-01	COVER, BATTERY	(FOR RM-Y102)

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